

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years (10)

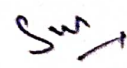
1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above (10)

Year -1 (2016-2017)							
S.No	Name of the value added courses offered (with 30 or more contact hours)	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of the course (Hrs)	Number of students enrolled in the year	Number of Students completing the course in the year
1	Business Communication	SLM MGT 01	2016-17	1	60	3	3
2	Film Appreciation	SJM JMC 13 03 GE 2114	2016-17	1	60	84	84
3	Numerical Methods and Programming	SPMS PHY 01 101 GEC 3104	2016-17	1	60	5	3
Year -2 (2017-18)							
S.No	Name of the value added courses offered (with 30 or more contact hours)	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of the course (Hrs)	Number of students enrolled in the year	Number of Students completing the course in the year
1	Food and Dine	SLLCH THM 01 02 01 GEC 4004	2017-18	1	60	32	32
2	Modern Cookery Event and Management	SLLCH THM 01 04 01 GEC 2024	2017-18	1	60	9	9
3	Typesetting in LaTeX	SPMMAT 01 02 01 GEC 2124	2017-18	1	60	36	34
Year -3 (2018-19)							
S.No	Name of the value added courses offered (with 30 or more contact hours)	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of the course (Hrs)	Number of students enrolled in the year	Number of Students completing the course in the year
1	Dynamics of Housekeeping	SLLCH THM 01 03 01 GEC 4004	2018-19	1	60	30	30
2	Film Appreciation	SJM JMC 13 03 GE 2114	2018-19	1	60	43	43
3	Business Communication	SLM MGT 01 101 GEC 3104	2018-19	3	60	16	16
4	Event Management	SJM JMC 13 04 GE 2114	2018-19	1	60	73	71
5	Film Appreciation	SJM JMC 13 03 GE 2114	2018-19	2	60	43	43
6	Food and Dine	SLLCH THM 01 02 01 GEC 4004	2018-19	1	60	35	35
7	Modern Cookery Event and Management	SLLCHTHM01 0401GEC 2024	2018-19	1	60	15	15
8	Stress and Health	SAHS PSY 01 03 04 GEC 4004	2018-19	1	60	44	44

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9	Typesetting in LaTeX	SPMMAT 01 02 01 GEC 2124	2018-19	1	75	26	26
10	Indian National Movement	SSH POS01(105)GE40 04	2018-19	1	60	33	31
11	Food Microbiology and Food Safety	SIAL NB 01 03 06 GEC	2018-19	1	60	15	15
12	Human Nutritional Requirements	SIAL NB 01 01 01 GEC	2018-19	1	60	58	55
13	Introduction to Cartography	SEE GEO 11 03 GE3104	2018-19	1	60	8	6
14	Yoga Education	SAHS ED 01 302 GE 4004	2018-19	1	60	37	35
15	Essentials of Guidance and Counselling	SOE0202 03GEC2024	2018-19	1	60	13	11
16	Environment and Society	SAHS SC 1 1 05 GEC 2002	2018-19	1	30	14	14
17	Global Environmental Issues	SEES EVS 01 02 03 GEC 2002	2018-19	1	30	23	23
18	Environmental Chemistry	SCS CH 1210 GE 4004	2018-19	1	60	20	20
19	Peace Education	SOE020440GEC3 104	2018-19	1	60	8	8
20	Performing and Visual Arts	SOE020238GEC2 024	2018-19	1	60	8	8
21	Basics of Medicinal Chemistry	SCS CH 1410 GE 4004	2018-19	1	60	19	19
22	Food Microbiology	SIALMB 010203	2018-19	1	60	9	9
23	Introduction to Microbiology	SIAL MB 010101 GEC	2018-19	1	60	41	41
24	Basic Economics	SAHS ECO 01101 GE 3104	2018-19	1	60	7	5
25	Chemistry of Materials	SCS CH 1110 GE 4004	2018-19	1	60	35	32
26	Educational Management and Planning	SAHS ED 01 101 GE 3104	2018-19	1	60	43	32
27	Numerical Methods	SPMMAT 01 01 02 GEC 3104	2018-19	1	60	25	25
28	Introductory Statistics	SPMS ST 01 101 GE 3014	2018-19	1	60	21	21
Year 4 (2019-20)							
S.No	Name of the value added courses offered (with 30 or more contact hours)	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of the course (Hrs)	Number of students enrolled in the year	Number of Students completing the course in the year
1	Business Communication	SLM MGT 01 101 GEC 3104	2019-20	4	60	40	39
2	Dynamics of Housekeeping	SLLCHTHM 010301GEC 4004	2019-20	2	60	41	41
3	Film Appreciation	SJM JMC 13 03 GE 2114	2019-20	2	60	104	104


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4	Academic Library Systems	SCSI LIS 0103 05GEC 3003	2019-20	1	45	7	7
5	सिनेमा अध्ययन	SLLCH HND 1303 GE 4004	2019-20	1	60	26	26
6	Stress and Health	SAHS PSY 01 03 04 GEC 4004	2019-20	1	60	50	50
7	INTRODUCTION TO CARTOGRAPHY	SEE GEO 1 1 03 GE 2114	2019-20	1	60	15	15
8	Indian National Movement	SSH POS01(105)GE40 04	2019-20	1	60	23	22
9	Intellectual Property Rights	SLM LAW 01 102 E 4105	2019-20	1	75	5	4
10	Plagiarism and academic integrity	SCSI LIS 01 03 07 GEC 4004	2019-20	1	60	68	68
11	Modern Optics	SPMS PHY 01 102 GEC 3104	2019-20	1	60	35	35
12	Information Literacy	SCSI LIS 01 01 01 GEC 4004	2019-20	1	60	60	60
13	Molecular Biology	SIALBC1304GE4 004	2019-20	1	60	43	43
14	Entrepreneurship Development	SLM COM 1304 GE 3104	2019-20	1	60	16	16
15	Fundamentals of Investment	SLM COM 11 01 GE 3104	2019-20	1	60	17	16
16	History of Haryana	SAHS HA 010101GE4004	2019-20	1	60	11	11
17	Life Skills in Education	SAHS ED 010301 GE 4004	2019-20	1	60	6	6
18	Mathematics for Chemists	SPMMAT010103 GEC3104	2019-20	1	60	17	17
19	Contemporary Issues of Indian Economy	SAHS ECO 01 305 GE 3104	2019-20	1	60	22	19
20	Value Based Education	SOE0201 GEC3104	2019-20	1	60	107	98
21	हिंदी की संस्कृति	SLLCH HND	2019-20	1	60	46	44
22	Work Physiology, Physical Fitness and Health	SIAL NB 11 02 GEC 4004	2019-20	1	60	43	40

Year -5 (2020-21)

S.No	Name of the value added courses offered (with 30 or more contact hours)	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of the course (Hrs)	Number of students enrolled in the year	Number of Students completing the course in the year
1	Business Communication	SLM MGT 01 101 GEC 3104	2020-21	1	60	28	28
2	Dynamics of Housekeeping	SLLCH THM 01 03 01GEC 4004	2020-21	2	60	39	39
3	Educational Management and Leadership	SOE 02 04 06 GEC 3104	2020-21	1	60	29	29
4	Event Management	SJM JMC 13 04 GE 2114	2020-21	2	60	84	84

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5	Film Appreciation	SJM JMC 13 03 GE 2114	2020-21	1	60	60	60
6	Food and Dine	SLLCH THM 01 02 01 GEC 4004	2020-21	1	60	7	7
7	ADVANCED MOLECULAR BIOLOGY	SIAL BC 1 3 03 GEC 4004	2020-21	1	60	3	3
8	Psychology in Everyday Life	SHSS PSY 01 02 02 GEC 4004	2020-21	1	60	85	81
9	Social and Community Psychology	SHSS PSY 01 03 03 GEC 4004	2020-21	1	60	6	6
10	Yoga and holistic health	SIAS YOGA 1102 GE 3104	2020-21	1	60	39	39
11	Stress and Health	SAHS PSY 01 03 04 GEC 4004	2020-21	2	60	109	109
12	Typesetting in LaTeX	SPMMAT 01 02 01 GEC 2124	2020-21	1	75	8	8
13	Intellectual Property Rights	SLM LAW 01 102 E 4105	2020-21	1	75	17	15
14	Indian National Movement	SSH POS01(105)GE40 04	2020-21	1	60	79	75
15	Applied Microbiology	SIALMB 1303 GEC 4004	2020-21	1	60	4	4
16	Techniques in Microbiology	SIAL MB 1 1 02 GEC 4004	2020-21	1	60	16	16
17	Clinical Biochemistry	SIAL BC 1 1 01 GEC 4004	2020-21	1	60	32	32
18	Drug Design and Discovery	SBS CH 010308 GEC 4004	2020-21	1	60	7	7
19	Geography of India	SEE GEO 1 3 05 GE 3104	2020-21	1	60	35	35
20	अस्मितामूलक साहित्य	SLLCH HND 1304 GE 4004	2020-21	1	60	11	11
21	Introduction To Advertising	SLM MGT 01 301 GEC 2023	2020-21	1	45	11	11
22	Latex For Science & Mathematics	SPMS PHY 01 201 GEC 2044	2020-21	1	60	8	8


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1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years

Syllabus of Courses

OFFERED TO OTHER DEPARTMENTS – SEMESTER I

BUSINESS COMMUNICATION

Course Code- SLM MGT 01 101 GEC 3104

Credit: 4

Objective:

The aim of the course is to develop skills and competencies in participants to be able to communicate effectively through the written and oral medium. Sensitivity towards cross cultural communication will be developed with familiarity with global business etiquette and protocols. The pedagogical focus of the course will be workshop based with emphasis on practice and skills development.

Contents:

UNIT I

Introduction and classification of communication: purpose of communication; process of communication; importance of communication in management; communication structure in organization; barriers & gateway in communication; 7 C's of communication; Impact of cross cultural communication.

UNIT II

Employment Communication : Writing CVs & Application Letter; Group discussions; interview; types of interview; candidates preparation; Interviewers preparation; Impact of Technological Advancement on Business Communication; Communication networks, Intranet, Internet, teleconferencing, videoconferencing.

UNIT III

Written communication and Oral communication: purpose of writing, pros & cons of written communication; principles of effective writing; writing technique; business letters and reports, reports: definition & purpose; types of business reports; reports writings; oral communication; principles of successful oral communication; two sides of effective oral communication; effective listening; non-verbal communication; body language.

UNIT IV

Group communication and Meetings: need, importance & planning of Meetings; drafting of notice; agenda, minutes & resolutions of Meeting; writing memorandum; press

15 | [CLICK FOR MAIN CONTENT TABLE](#)

release;press conference;;Business etiquettes; etiquettes; telephonic & table etiquettes;
PRESENTATION SKILLS :Welements of presentation; designing a presentation,
advanced visual support for business presentation;types of visual aid, appearance &
posture, practicing delivery of presentation.

Suggested Reading:

1. Bovee, Courtland L, Thill, John V. and Abha Chatterjee (2011). *Business Communication Today*. (10th ed.). New Delhi: Pearson
2. Chaturvedi, P. D. and Chaturvedi, Mukesh (2011). *Business Communication, Concepts: Cases and Applications*. (2nd ed.). New Delhi: Pearson
3. Gupta Mukherjee, Jaba (2011). *Management Communication – A Case Analysis Approach*. (4th ed.) Noida: Pearson.
4. Lesiker, Raymond V., Flatley Marie E., Rentz, Paula and Neerja Pande (2015). *Business Communication: Connecting in a Digital World*. (13th ed.). New Delhi: McGraw Hill Education
5. O'Rourke, James S. IV and Gupta, Jaba Mukherjee (2011). *Business Communication: A Case – Analysis Approach*. (4th ed.). New Delhi: Pearson

Note: The list of cases, references and relevant articles will be provided by the faculty in the class.

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SEMESTER III Paper Title: FILM APPRECIATION

SJM JMC 13 03GE 2114

UNIT-I

Film as medium of expression; Film Genres

Approaching Films: Semiotics, Psychoanalysis, Linguistics,

Film forms: narrative and non-narrative

UNIT-II

Film Aesthetics

Regional and National Cinema in India, Bollywood, World cinema,

Film Movements; The rise of Multiplex cinema

UNIT-III

Basic Camera shots and Movements

Film editing Principles: Mise-en-scene and montage

Diegetic and Non-diegetic elements in a film

UNIT-IV

Major film festivals and awards: Indian and Global

Writing Film reviews

Film Certification categories

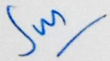
Reading list

1. Eric Baranenn&Krishnaswamy; *Indian Film* (OVP, 2nd Edition, 1980).
2. KhwajaAhemad Abbas, *How films are made* (National Book Trust, 1977).
3. MaricSetton; *Film as an art and appreciation*, (NCERT, New Delhi).

4. *Cinematography Censorship rules*, (Govt. of India Press, Nasik, 1969).

Practicals

Writing Film Appreciation for 5 feature films of Bollywood and cinema from other parts of the world.



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Numerical Methods and Programming

Scheme Version: 2019	Name of the subject: Numerical Methods and Programming	L	T	P	C
	Applicable to Programs: M.Sc. Physics	3	1	0	4
Subject Code: SPMS PHY 01 101 GEC 3104	Prerequisite: Mathematics during B.Sc./BCA	Total hours = 60			
	Semester I				

Course Objective: To make student expert in numerical methods and programming the physics problems related to various phenomena

UNIT I

C/C++:

Flow charts, Algorithms, Integer and floating point arithmetic, Precision, Variable types, Arithmetic statements, Input and output statements, Control statements, Executable and non-executable statements, Arrays, Repetitive and logical structures, Subroutines and functions, Operation with files, Operating systems, Creation of executable programs.

UNIT II

Numerical Methods of Analysis:

Solution of algebraic and transcendental equations: Iterative, Bisection and Newton-Raphson methods; Solution of simultaneous linear equations: Matrix inversion method; Interpolation: Newton and Lagrange formulas; Numerical differentiation, Numerical Integration: Trapezoidal, Simpson and Gaussian quadrature methods; Least-square curve fitting: Straight line and polynomial fits; Numerical solution of ordinary differential equations: Euler and Runge-Kutta methods.

UNIT III

Simulations:

Generation of uniformly distributed random numbers, Statistical tests of randomness, Monte-Carlo evaluation of integrals and error analysis, Non-uniform probability distributions, Importance sampling, Rejection method, Metropolis algorithm, Molecular diffusion and Brownian motion as random walk problems and their Monte-Carlo simulation.

UNIT IV

Short introduction to Programming using C and Psi Lab, class projects may be implemented in any language.

Learning Outcome: Students will be able to learn

- About solutions of linear and non-linear equations, and the convergence of the solutions, along with solutions of simultaneous linear equations.
- Numerical differentiation and integration.
- Monte Carlo methods

References:

1. **S. S. M. Wong**, Computational Methods in Physics and Engineering, World Scientific, 2nd Edition, 1997.
2. **V. Rajaraman**, Computer Oriented Numerical Methods, Prentice Hall of India, 4th Edition, 2015.
3. **V. Rajaraman**, Computer Programming in FORTRAN 90/95, Prentice Hall of India Pvt Ltd, 1st Edition, 2015.
4. **C. F. Gerald**, Applied Numerical Analysis, Pearson/Addison Wesley, 7th Edition, 2003.
5. **Landau and Binder**, A Guide to Monte Carlo Simulations in Statistical Physics, Cambridge University Press, 3rd Edition, 2013.
6. **Teukolsky, Vetterling and Flannery**, Numerical Recipes: The Art of Scientific Computing, Cambridge University Press, 3rd Edition 2007.

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Credits-4

Course- Food and Dine

Course Code- SLLCH THM 01 02 01 GEC 4004

Objective:-

The aim of the course is to familiarize students with various types of Food & Beverages services provided by hospitality industry.

Content

UNIT-1

Introduction to catering services

- 1.1 Introduction to catering establishment.
- 1.2 Classification, types of catering establishment.
- 1.3 Hygiene and grooming standards of F&B staff.
- 1.4 Restaurant service equipments.

UNIT-2

Meal and Menu Planning

- 2.1 Introduction to menu and planning, different types of menu
- 2.2 Sequence of French classical menu.
- 2.3 Types of meal.
- 2.4 Types of food service.

UNIT-3

Introduction to Beverages

- 3.1 Introduction and classification of beverages.
- 3.2 Brief Introduction of Alcoholic Beverages.
- 3.3 Brief Introduction and Non Alcoholic beverages.
- 3.4 Services of Alcoholic Beverages.

UNIT-4

Preparation for service

- 4.1 Organizing mise-en-scene and mise-en-place.

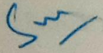
4.2 Cover set up, napkin foldings.

4.3 Tray and trolley set up.

4.4 Procedure for service.

Suggested Readings:-

- John, The Restaurant (From Concept to Opertion), Wiley, 2013
- Graham Brown, The Waiter Handbook. Global Books & Subscription Services New Delhi, 1980
- Costas Katsigris, Chris Thomas, The Bar and Beverage Book, 5th Edition, Wiley Publications, 2012
- James Murphy, Principles and Practices of Bar and Beverage Management, Good fellow Publishers - Manage First, 2002
- Brian Varghese, Food & Beverage Service Management, 2002
- Sudhir Andrews, Food & Beverage Service Training Manual. Tata Mc Graw Hill, 2003
- Lillicrap & Cousins, Food & Beverage Service, ELBS, 2010
- Brown, Heppner & Deega, Introduction F& B Service, 2002



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Course- Modern Cookery and Event Management

Credits-4

Course Code- SLLCH THM 01 04 01 GEC 2024

Objective:-

The aim of the course is to familiarize the students with Modern Cookery and gives a insight knowledge of various events, their management.

Content

UNIT 1

Overview of Kitchen

- 1.1 Introduction to kitchen, hygiene and safety.
- 1.2 Areas of kitchen.
- 1.3 Equipment's.
- 1.4 Knife and their uses.

UNIT 2

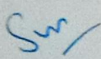
Sauces, Soups, Salads

- 2.1 Mother sauces.
- 2.2 Salads.
- 2.3 Soups.
- 2.4 Bread and egg preparation.

UNIT 3

Cooking Methods, Vegetable cuts and Commodities

- 3.1 Methods of cooking.
- 3.2 Cuts of vegetables.
- 3.3 Commodities used in Indian cuisine.
- 3.4 Equipments required.


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UNIT 4

Overview of Events

- 4.1 Introduction to events.
- 4.2 Types of events.
- 4.3 Planning events and management.
- 4.4 Principals of event management.

Practicals:-

Menu 1

- Salads preparation
- Eg. Waldrof Salad, Ceaser Salad, Fruit salad, Russian Salad.

Menu 2

- Important and used Sauces
- Eg. Mayonnaise, Behamel, Mustard, Tartar etc.

Menu 3

- Egg Preparations
- Eg. Scrambled, Sunny side up, Poached, Boiled, Scotch Egg etc.

Menu 4

- Bakery Items
- Eg. Sponge Cake, Fruit Cake, Biscuits, B&B Pudding etc.

Menu 5

- Sandwich Preparations
- Eg. Grilled Sandwich, Cold Sandwich, Salami Sandwich, Paneer Cocktail Sandwich etc.

Menu 6

- Snacks Preparation
- Eg. Cutlet, Burger, Onion Rings, Fries etc.

Menu 7

- Pizza Cookery
- Eg. Cheese Pizza, Vegetable Pizza, Non-veg Pizza etc.

Menu 8

- Chinese Snacks
- Eg. Noodles, Honey Chilli Potato, Spring Rolls, Thupka etc.

Menu 9

GEC COURSES OFFERED TO PG STUDENTS OF OTHER DEPARTMENTS

TYPESETTING IN LATEX

(SPMMAT 01 02 01 GEC 2124)

UNIT I

Preparing an input file, sentences and paragraphs, the document class, sectioning, display material, running LaTeX, changing the type style, producing mathematical symbols and mathematical formulae, arrays, delimiters, multiline formulae, putting one thing on other, spacing in math mode.

UNIT II

Defining command and environments, Producing and including graphics in a LaTeX file, figures and other floating bodies, lining it up in columns, table of content, cross-reference, bibliography and citation, making index and glossary, slides, overlays and notes, letters.

UNIT III

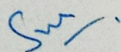
Design it yourself: document class, page style, title page, customizing the style, line and page breaking, numbering, length, spaces and boxes, formatting with boxes, centring and flushing, list making environments, changing font type size and special symbols, picture, picture environments, picture objects, text, boxes, straight lines, arrow, stacks, circles, oval, framing, curve, grid, repeat patterns.

UNIT IV

Making presentation slides in beamer class LaTeX, various styles in beamer presentation, dynamic slides. PostScript macros for Generic TeX (PsTrix): arguments, dimension, coordinates, angles, line styles, fill styles, custom styles, custom graphics, picture tools, text tricks, node and connection special tricks. Basics of MathJax, MathJax configuration options.

Suggested Readings:

1. Leslie Lamport. *A Document Preparation System User's Guide and Reference Manual*, Addison-Wesley Publishing Company, 2001.
2. Kottwitz, S. *LaTeX Beginner's Guide*. Packt Publishing Ltd., UK, 2011.
3. Tantau, T. User Guide to the Beamer Class, <http://latex-beamer.sourceforge.net>.
4. Oetiker, Tobias. The Not So Short Introduction to LATEX2E, <https://tobi.oetiker.ch/lshort/lshort.pdf>.



Dynamics of Housekeeping.

Course Code- SLLCH THM 01 03 01 GEC 4004

Objective:-

This course deals with the theory of housekeeping operations in hotel business. Students shall learn and develop guest service skills in classes. Learners shall also be given an insight to housekeeping practices, the use and care of equipment, and tools along with their roles in various areas of professional housekeeping.

Content

UNIT-1

Introduction to Housekeeping Department

- 1.1 Introduction & functions of housekeeping department.
- 1.2 Organizational structure of housekeeping department.
- 1.3 Role & scope of housekeeping.
- 1.4 Emerging trends in housekeeping.

UNIT-2

Laundry

- 2.1 Introduction, types of laundry.
- 2.2 Process of laundry.
- 2.3 Laundry equipments & uses.
- 2.4 Introduction to stain removals & removal common stains.

UNIT-3

Cleaning in Housekeeping

- 3.1 Different types of Surfaces.
- 3.2 Cleaning and maintenance of various surfaces.
- 3.3 Cleaning agents used in housekeeping department.
- 3.4 Cleaning equipments.

UNIT-4

Decoration & Designing

- 4.1 Concept of interior decoration in housekeeping department.
- 4.2 Concept and types of flower arrangement.
- 4.3 Concept and types of towel art.
- 4.4 Horticulture and its role in hotels.

Suggested Reading:-

- Joan C Branson & Margaret Lennox Hotel Hostel and Hospital Housekeeping, (ELBS), 2006
- Sudhir Andrews, Hotel House Keeping –Tata Mc Graw Hill, 2008
- Raghubalan, Hotel Housekeeping Operations & Management, Oxford University Press, 2008
- Jones-Housekeeping and Front Office ,Edward Publication, 1986

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SEMESTER III Paper Title: **FILM APPRECIATION**

SJMJC 13 03 GE 2114

UNIT-I

Film as medium of expression; Film Genres

Approaching Films: Semiotics, Psychoanalysis, Linguistics,

Film forms: narrative and non-narrative

UNIT-II

Film Aesthetics

Regional and National Cinema in India, Bollywood, World cinema,

Film Movements; The rise of Multiplex cinema

UNIT-III

Basic Camera shots and Movements

Film editing Principles: Mise-en-scene and montage

Diegetic and Non-diegetic elements in a film

UNIT-IV

Major film festivals and awards: Indian and Global

Writing Film reviews

Film Certification categories

Reading list

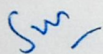
1. Eric Baranenn&Krishnaswamy; *Indian Film* (OVP, 2nd Edition, 1980).
2. KhwajaAhemad Abbas, *How films are made* (National Book Trust, 1977).
3. MaricSetton; *Film as an art and appreciation*, (NCERT, New Delhi).

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4. *Cinematography Censorship rules*, (Govt. of India Press, Nasik, 1969).

Practicals

Writing Film Appreciation for 5 feature films of Bollywood and cinema from other parts of the world.



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OFFERED TO OTHER DEPARTMENTS – SEMESTER I

BUSINESS COMMUNICATION

Course Code-SLM MGT 01 101 GEC 3104

Credit: 4

Objective:

The aim of the course is to develop skills and competencies in participants to be able to communicate effectively through the written and oral medium. Sensitivity towards cross cultural communication will be developed with familiarity with global business etiquette and protocols. The pedagogical focus of the course will be workshop based with emphasis on practice and skills development.

Contents:**UNIT I**

Introduction and classification of communication: purpose of communication; process of communication; importance of communication in management; communication structure in organization; barriers & gateway in communication; 7 C's of communication; Impact of cross cultural communication.

UNIT II

Employment Communication : Writing CVs & Application Letter; Group discussions; interview; types of interview; candidates preparation; Interviewers preparation; Impact of Technological Advancement on Business Communication; Communication networks, Intranet, Internet, teleconferencing, videoconferencing.

UNIT III

Written communication and Oral communication: purpose of writing, pros & cons of written communication; principles of effective writing; writing technique; business letters and reports, reports: definition & purpose; types of business reports; reports writings; oral communication; principles of successful oral communication; two sides of effective oral communication; effective listening; non-verbal communication; body language.

UNIT IV

Group communication and Meetings: need, importance & planning of Meetings; drafting of notice; agenda, minutes & resolutions of Meeting; writing memorandum; press

release;press conference;Business etiquettes; etiquettes; telephonic & table etiquettes;
PRESENTATION SKILLS :Welements of presentation; designing a presentation,
advanced visual support for business presentation;types of visual aid, appearance &
posture, practicing delivery of presentation.

Suggested Reading:

1. Bovee, Courtland L, Thill, John V. and Abha Chatterjee (2011). *Business Communication Today*. (10th ed.). New Delhi: Pearson
2. Chaturvedi, P. D. and Chaturvedi, Mukesh (2011). *Business Communication, Concepts: Cases and Applications*. (2nd ed.). New Delhi: Pearson
3. Gupta Mukherjee, Jaba (2011). *Management Communication – A Case Analysis Approach*. (4th ed.) Noida: Pearson.
4. Lesiker, Raymond V., Flatley Marie E., Rentz, Paula and Neerja Pande (2015). *Business Communication: Connecting in a Digital World*. (13th ed.). New Delhi: McGraw Hill Education
5. O'Rourke, James S. IV and Gupta, Jaba Mukherjee (2011). *Business Communication: A Case – Analysis Approach*. (4th ed.). New Delhi: Pearson

Note: The list of cases, references and relevant articles will be provided by the faculty in the class.



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SEMESTER III Paper Title: EVENT MANAGEMENT

SIM JMC 13 04 6E 2119

Unit-1

Concept of event; Types of Events
Need for Professional Event Management
Scope of Event Management
Event Industry in India

Unit-2

Event management: Planning and steps
Preparing event proposal, pitching for the event
Permissions and licences for various events
Event Operations; Event technology and Logistics

Unit-3

Marketing mix, preparing event proposal, pitching for the event
Sponsorships, Branding through events
Media relations, Briefing journalists

Unit-4

Various risks and risk assessment in events
Crowd management
Preparing Contingency Plan
Communication in Event Crisis

Reading List

Goldblatt, J. & Supovitz, F.; Dollars & Cents. *How to Succeed in the Special Events Business*. (John Wiley & Sons: New York, 1999).

Goldblatt, J. & Nelson, K.; *The International Dictionary of Event Management*. (Second Edition. John Wiley & Sons, Inc.: New York, 2001).

Hoyle, L. *Event Marketing*, (John Wiley & Sons, Inc.: New York, 2002).

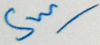
Malouf, L. *Behind the Scenes at Special Events*. (John Wiley & Sons: New York, 1999).

Amsborg, G. and et al.; *Professional Convention Management Association. Professional Meeting Management – Comprehensive Strategies for Meetings, Conventions and Events*. (5th Edition. Dubuque Iowa, 2008).

Rutherford-Silvers, J. (2012). *Professional Event Coordination*. John Wiley & Sons Inc.: New York, NY

PRACTICAL

1. Making event plan of a musical concert
2. Crisis Plan of an event
3. Making Promotional plan of events


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SEMESTER III Paper Title: FILM APPRECIATION

SJM JMC 13 03 GE 2114

UNIT-I

Film as medium of expression; Film Genres

Approaching Films: Semiotics, Psychoanalysis, Linguistics,

Film forms: narrative and non-narrative

UNIT-II

Film Aesthetics

Regional and National Cinema in India, Bollywood, World cinema,

Film Movements; The rise of Multiplex cinema

UNIT-III

Basic Camera shots and Movements

Film editing Principles: Mise-en-scene and montage

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UNIT-IV

Major film festivals and awards: Indian and Global

Writing Film reviews

Film Certification categories

Reading list

1. Eric Baranenn&Krishnaswamy; *Indian Film* (OVP, 2nd Edition, 1980).
2. KhwajaAhemad Abbas, *How films are made* (National Book Trust, 1977).
3. MaricSetton; *Film as an art and appreciation*, (NCERT, New Delhi).

4. *Cinematography Censorship rules*, (Govt. of India Press, Nasik, 1969).

Practicals

Writing Film Appreciation for 5 feature films of Bollywood and cinema from other parts of the world.

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Course- Food and Dine

Credits-4

Course Code- SLLCH THM 01 02 01 GEC 4004

Objective:-

The aim of the course is to familiarize students with various types of Food & Beverages services provided by hospitality industry.

Content

UNIT-1

Introduction to catering services

- 1.1 Introduction to catering establishment.
- 1.2 Classification, types of catering establishment.
- 1.3 Hygiene and grooming standards of F&B staff.
- 1.4 Restaurant service equipments.

UNIT-2

Meal and Menu Planning

- 2.1 Introduction to menu and planning, different types of menu
- 2.2 Sequence of French classical menu.
- 2.3 Types of meal.
- 2.4 Types of food service.

UNIT-3

Introduction to Beverages

- 3.1 Introduction and classification of beverages.
- 3.2 Brief Introduction of Alcoholic Beverages.
- 3.3 Brief Introduction and Non Alcoholic beverages.
- 3.4 Services of Alcoholic Beverages.

UNIT-4

Preparation for service

- 4.1 Organizing mise-en-scene and mise-en-place.

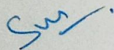
4.2 Cover set up, napkin foldings.

4.3 Tray and trolley set up.

4.4 Procedure for service.

Suggested Readings:-

- John, The Restaurant (From Concept to Opertion), Wiley, 2013
- Graham Brown, The Waiter Handbook. Global Books & Subscription Services New Delhi, 1980
- Costas Katsigris, Chris Thomas, The Bar and Beverage Book, 5th Edition, Wiley Publications, 2012
- James Murphy, Principles and Practices of Bar and Beverage Management, Good fellow Publishers - Manage First, 2002
- Brian Varghese, Food & Beverage Service Management, 2002
- Sudhir Andrews, Food & Beverage Service Training Manual. Tata Mc Graw Hill, 2003
- Lillicrap & Cousins, Food & Beverage Service, ELBS, 2010
- Brown, Heppner & Deega, Introduction F& B Service, 2002



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Course- Modern Cookery and Event Management

Credits-4

Course Code- SLLCH THM 01 04 01 GEC 2024

Objective:-

The aim of the course is to familiarize the students with Modern Cookery and gives a insight knowledge of various events, their management.

Content

UNIT 1

Overview of Kitchen

- 1.1 Introduction to kitchen, hygiene and safety.
- 1.2 Areas of kitchen.
- 1.3 Equipment's.
- 1.4 Knife and their uses.

UNIT 2

Sauces, Soups, Salads

- 2.1 Mother sauces.
- 2.2 Salads.
- 2.3 Soups.
- 2.4 Bread and egg preparation.

UNIT 3

Cooking Methods, Vegetable cuts and Commodities

- 3.1 Methods of cooking.
- 3.2 Cuts of vegetables.
- 3.3 Commodities used in Indian cuisine.
- 3.4 Equipments required.

UNIT 4

Overview of Events

- 4.1 Introduction to events.
- 4.2 Types of events.
- 4.3 Planning events and management.
- 4.4 Principals of event management.

Practicals:-

Menu 1

- Salads preparation
- Eg. Waldrof Salad, Ceaser Salad, Fruit salad, Russian Salad.

Menu 2

- Important and used Sauces
- Eg. Mayonnaise, Behamel, Mustard, Tartar etc.

Menu 3

- Egg Preparations
- Eg. Scrambled, Sunny side up, Poached, Boiled, Scotch Egg etc.

Menu 4

- Bakery Items
- Eg. Sponge Cake, Fruit Cake, Biscuits, B&B Pudding etc.

Menu 5

- Sandwich Preparations
- Eg. Grilled Sandwich, Cold Sandwich, Salami Sandwich, Paneer Cocktail Sandwich etc.

Menu 6

- Snacks Preparation
- Eg. Cutlet, Burger, Onion Rings, Fries etc.

Menu 7

- Pizza Cookery
- Eg. Cheese Pizza, Vegetable Pizza, Non-veg Pizza etc.

Menu 8

- Chinese Snacks
- Eg. Noodles, Honey Chilli Potato, Spring Rolls, Thupka etc.

Menu 9

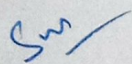
- Pasta Cookery
- Eg. White Sauce Pasta, Red sauce Pasta, Bolognaise Pasta, Macaroni etc.

Menu 10

- Indian Snacks
- Samosa, Pakoras, Dosa, Idli etc.

Suggested Readings:-

- John Wiley, Cooking Essentials for the New Professional Chef, The Culinary Association of America, 2001
- Parvinder S Bali, Food Production Operations, Oxford University Press, 2014
- M J Leto & W K H Bode, Larder Chef, Butterworth- Heinemann, 2006
- Philip E. Thangam, Modern Cookery (Vol- I), Orient Longman, 2010
- Kinton & Cessarani, Practical Cookery, 2004
- Kauffman & Cracknell, Practical Professional Cookery, 1999
- Wayne Gislen, Professional Cooking, Le Cordon Bleu, 2010
- Andrew Hale Feinstein and John M. Stefanelli, Purchasing Selection and Procurement for the Hospitality Industry, 2004



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GENERIC ELECTIVE COURSE-II

STRESS AND HEALTH

SAHS PSY 01 03 04 GEC 4004

Credits: 4 (Hrs/week: 4)

Total: 100 marks
Internal Assessment: 30 marks
Examination: 70 marks

UNIT-I

Stress- Its meaning, Impact and Sources. Stress Cycle. Appraisal of Stress. Coping Styles

Model of stress- GAS Model, Transaction Model, The Fight or Flight Response (Stress and Physiology)

UNIT-II

Stressors- Physical, Social, Biological, Familial and Psychological (Biopsychosocial Aspects).

Life Events and Daily Hassles. Habits and Stress. PTSD. Hardiness.

UNIT-III

Illness- Cardiovascular, Digestive, Musculoskeletal and Immune system.

Stress and Mental Health. Stress and Cancer

UNIT-IV

Assertiveness Training, Communication Skills and Time Management

Meditation and Visualization, Vipasana, Relaxation Techniques and Yoga.

Recommended Books:

1. Brehm, A. Barbara (1998): Stress Management: Increasing Your Stress Resistance. Pearson, New Delhi.
2. Sarafino, E.P. & Smith, T.W. (2012): Health Psychology: Biopsychosocial Interactions. Wiley, New Delhi.
3. Komoroff, A. L. (2008): Stress Management: Approaches for Preventing and Reducing Stress. Boston, Harvard University, Harvard Health Publication.
4. Lovallo, W.R. (2016) 3rd Edit: Stress & Health: Biological and Psychological Interactions. Sage Publication, Oklahoma, USA.


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GEC COURSES OFFRED TO PG STUDENTS OF OTHER DEPARTMENTS

TYPESETTING IN LATEX

(SPMMAT 01 02 01 GEC 2124)

UNIT I

Preparing an input file, sentences and paragraphs, the document class, sectioning, display material, running LaTeX, changing the type style, producing mathematical symbols and mathematical formulae, arrays, delimiters, multiline formulae, putting one thing on other, spacing in math mode.

UNIT II

Defining command and environments, Producing and including graphics in a LaTeX file, figures and other floating bodies, lining it up in columns, table of content, cross-reference, bibliography and citation, making index and glossary, slides, overlays and notes, letters.

UNIT III

Design it yourself: document class, page style, title page, customizing the style, line and page breaking, numbering, length, spaces and boxes, formatting with boxes, centring and flushing, list making environments, changing font type size and special symbols, picture, picture environments, picture objects, text, boxes, straight lines, arrow, stacks, circles, oval, framing, curve, grid, repeat patterns.

UNIT IV

Making presentation slides in beamer class LaTeX, various styles in beamer presentation, dynamic slides. PostScript macros for Generic TeX (PsTrix): arguments, dimension, coordinates, angles, line styles, fill styles, custom styles, custom graphics, picture tools, text tricks, node and connection special tricks. Basics of MathJax, MathJax configuration options.

Suggested Readings:

1. Leslie Lamport. *A Document Preparation System User's Guide and Reference Manual*, Addison-Wesley Publishing Company, 2001.
2. Kottwitz, S. *LaTeX Beginner's Guide*. Packt Publishing Ltd., UK, 2011.
3. Tantau, T. User Guide to the Beamer Class, <http://latex-beamer.sourceforge.net>.
4. Oetiker, Tobias. The Not So Short Introduction to LATEX2E, <https://tobi.oetiker.ch/lshort/lshort.pdf>.

Offered to other Departments:

Paper-V Code: (SSHPOS01 (105) GE4004)

Semester-I

Indian National Movement

Unit-I

Colonialism in India

National Movement

Unit-II

Peasant Movement

Labour Movement

Unit-III

Revolutionary Movement

The rise and growth of communalism

Unit-IV

An economic critique of Colonialism

Freedom and Partition

Constitutional development

Suggested Readings:

- Bipin Chandra (1971), *Modern India*, New Delhi
- Subhas Kashyap, *Swatantrta Aandolan ka Itihas*, National Book Trust India, New Delhi. (Hindi)
- Vipin Chandra, *Bharat ka swatantrta Sangharsh*, Hindi Madhayam Karyanayan Delhi University, Delhi. (Hindi)
- B L Grower, Yashpal, *Bhartiya Swatantrta Sangram tatha Sambaidhanik Vikas*, S Chand & Company, Ltd New Delhi. (Hindi)
- Sumit Sarkar, *Aadhunik Bharat (1885-1947)* Rajkamal Prakashan, New Delhi. (Hindi)
- Tara Chand (1961), *History and Freedom movement in India*, New Delhi
- R. Palme Dutt (1949), *India Today*, Bombay

- A.R. Desai (1959), *Social Background of Indian Nationalism*, Bombay
- Sumit Sarkar (1983), *Modern India, 1885-1947*
- R.C.Dutt (1960), *The Economic History of India Under British Rule*, Delhi
- Bipan Chandra (1984) *the Rise and Growth of Economic Nationalism in India*, New Delhi.
- B.N.Ganguly (1977) *Indian Economic Thought- Nineteenth Century perspectives*, New Delhi.
- Arun Chandra Guha (1971) *First spark of revolution*, Bombay
- Percival Spear (1974), *Oxford History of India*, New Delhi.
- Bipan Chandra (1987), *India's Struggle for Independence*, Penguin Books, New Delhi
- Mushirul Hasan (1981) *Communal and Pan Islamic Trends in Colonial India*, Delhi.

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FOOD MICROBIOLOGY AND FOOD SAFETY
(CREDITS: THEORY-4)

THEORY

LECTURES: 60

Objectives:

The student will be able to-

- To study the important genera of microorganisms associated with food and their characteristics.
- To learn the role of microorganisms in food spoilage, food fermentation and food borne diseases.
- To understand the concept of food preservation by conventional and recent methods.
- To study microbiological quality control in food safety and hygiene.
- To familiarise with food safety regulations and food safety management tools.

UNIT I: Microorganisms Associated with Food and its Spoilage

14

- Sources of contamination in foods
- Important types of food spoilage bacteria and fungi
- Factors affecting the growth of microorganisms in food (temperature, pH, water activity, redox potential, oxygen availability, relative humidity and presence of antimicrobial substances).
- Spoilage of some specific food groups (milk, egg, meat, fruits and vegetables and their juices, canned foods)

UNIT II: Food Fermentation

8

- Definition of fermentation and types of fermentations
- Microorganisms involved in food fermentations
- Advantages of food fermentations
- Types of fermented foods and microorganisms involved in production of vinegar, sauerkraut, yoghurt, soya sauce and wine
- Traditional Indian and oriental fermented foods

UNIT III: Food borne Diseases

12

- Food borne infections, food borne intoxications and food borne toxicoinfections- definitions with examples
- Types of bacterial and fungal toxins
- Symptoms, foods involved and prevention of some commonly occurring food borne diseases caused by *Clostridium botulinum*, *Staphylococcus aureus*, *Shigella sp.*, *E.coli*, *Salmonella*, *Bacillus cereus*, *Vibrio cholerae* and rotavirus

UNIT IV: Enumeration and Control of Microorganisms in Food

10

- Qualitative and quantitative methods of enumeration-(conventional and rapid methods)
- Principles and methods of preservation -use of high temperature, low temperature, drying, filtration, radiations, chemical preservatives and bio preservatives
- Hurdle Technology

UNIT V: Principles of Hygiene and Sanitation in Food Service Establishments

6

- Important terms and definitions- hygiene, sanitation, disinfection, sterilization
- Control methods using physical and chemical agents
- Methods of waste disposal, pest and rodent control measures, personnel hygiene and its importance

UNIT VI: Food Safety and Food Safety Management Tools

10

- Important terms and definitions
- Types of hazards (biological, chemical, physical hazards)
- Factors affecting Food Safety
- Microbiological quality control
- Important food safety tools- Indicator microorganisms, HACCP, ISO series, PFA, TQM and Risk analysis

RECOMMENDED READINGS

- Frazier, WC and Westhoff, D.C.(2004). Food Microbiology, TMH, New Delhi.
- Jay and James M, (2000). Modern Food Microbiology, CBS Publication, New Delhi.
- Garbutt, J. (1997) Essentials of Food Microbiology, Arnold, London.

- Pelczar, MJ, Chan ,ECS and Krieg, N.R.,(1993). Microbiology, 5th Ed., TMH, New Delhi
- Lawley, R, Curtis, L and Davis,J, 2004 The Food Safety Hazard Guidebook , RSC publishing.
- De Vries, (1997) Food Safety and Toxicity, CRC, New York
- Marriott, N.G.(1985) Principles of Food Sanitation, AVI, New York
- Forsythe, S.J.(1987) Microbiology of Safe Food, Blackwell Science, Oxford
- Adams ,M.R., Moss,M.O. and Peter McClure,P.(2015) Food Microbiology, 4thed RSC Publishing
- Montville,T.J. and Matthews,K.R, (2008) Food Microbiology:An Introduction .2nded,ASM Press,Washington DC,USA.



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HUMAN NUTRITIONAL REQUIREMENTS

(CREDITS: THEORY-5)

LECTURES: 60

THEORY

Objectives:

The student will be able to:

1. Critically evaluate the methodology and derivation of requirements of nutrients.
2. Understand how the nutritional considerations change with age and physiological group.
3. Appreciate the effect of malnutrition on growth and cognitive development.
4. Understand how nutrient requirements change in special conditions.
5. Learn various measures for improving the quality of diets.

UNIT I: Human Nutrient Requirements

30

- Historical perspective of nutrient requirements and definitions (Recommended Nutrient Intakes, Minimum requirements, Subsistence requirements, Dietary reference intakes, Optimum nutrient intake)
- Methods of assessment of nutrient needs (factorial approach, balance studies, nutrient turnover, isotope studies, depletion-repletion studies, obligatory loss, enzyme studies)– a critical review
- Critical evaluation of sensitive methods and derivations of requirements, factors affecting the requirements, recommended dietary allowances of macronutrients for all age groups:
 - Energy
 - Carbohydrates and dietary fibre
 - Proteins and amino acids
 - Lipids and fatty acids
 - Water soluble vitamins
 - Fat soluble vitamins
 - Minerals and trace elements
 - Water

- Food Pyramid, Dietary guidelines for Indians, Guidelines for physical activity (national and international)

UNIT II: Growth and Development through Lifecycle

15

- Aspects of growth- cellular to physical
- Determinants of growth and development in children
- Nutritional considerations for adults, pregnant & lactating mothers, infants, preschoolers, school-age children, adolescents, elderly.
- Impact of altered nutrition on growth and development
- Maternal malnutrition and pregnancy outcome
- Malnutrition and cognitive development
- Body composition changes through the lifecycle and its consequences

UNIT III: Nutrition in Special Conditions

5

Physiological changes and altered nutritional requirements in

- Extreme temperatures - low and high
- High altitude
- Space nutrition and food systems
- Sports nutrition

UNIT IV: Improving Nutritional Quality of Diets

10

- Ongoing nutrition transition and its implications.
- Ways of improving nutritional quality of diets.
- Assessment of protein quality.
- Dietary diversification.
- Bioavailability of nutrients.
- Nutrient losses during cooking and processing.
- Emerging concepts in human nutrition-Nutrigenomics, nutraceuticals, functional foods and bioactive compounds.

RECOMMENDED READING

- Chadha R and Mathur P.(2015) Nutrition: A Lifecycle Approach. Orient Blackswan, New Delhi.
- ICMR (2010). Nutrient Requirements and Recommended Dietary Allowances for Indians. National Institute of Nutrition, Hyderabad.
- FAO/WHO/UNU (2004). Human Energy Requirements. Report of a Joint Expert Consultation.
- WHO (2007). Protein and Amino acid Requirements in Human Nutrition. Report of a joint WHO/FAO/UNU expert consultation. WHO Technical Report Series 935.
- FAO/WHO (2004). Vitamin and Mineral Requirements in Human Nutrition. Report of a joint WHO/FAO/UNU expert consultation.
- Bamji M.S., Rao N.P., Reddy V. Eds. (2009). Textbook of Human Nutrition. 3rd Edition. Oxford and IBH Publishing Co. Pvt. Ltd.
- NFI (2006). Nutrition in Developmental Transition. NFI-WHO (SEARO) Symposium.
- Shils M.E., Shike M, Ross A.C., Caballero B and Cousins RJ. (2005) Modern Nutrition in Health and Disease. 10th ed. Lipincott, William and Wilkins.
- Mahan LK and Escott- Stump S. (2008) Krause's Food and Nutrition Therapy. 12th ed. WB Saunders-Elsevier. USA.
- ILSI (2006). Present Knowledge in Nutrition. Ed. Bowman B A and Russel R M. 9th edition. ILSI Press, Washington, DC

Sum .

5. King, C.A.M(1975): **Oceanography for Geographers** E. Arnold, London
6. Sharma, R.C. and Vatel M. (1970): **Oceanography for Geographers**, Chetnya Publishing House, Allahabad
7. Shepard, F.P. (1948): **Submarine Geology**, Harper & Sons, New York
8. Thurman, H.B. (1984): **Introductory Oceanography**, Charles Webber E. Merril Publishing Co.
9. Weisberg, J. and Howard(1976): **Introductory Oceanography**, McGraw-Hill Book Co., New York, 1976

M.Sc. Geography Semester I
Course Title – Introduction to Cartography
Course code- SEE GEO 1 1 03 GE 2114

Credit - 4

Course Outline

Unit I

The nature and scope of cartography; Scale: Types of Scale; Map - types of maps. Methods of showing relief; Representation of different landforms by contours; Representation of temperature, pressure and rainfall data.

Unit II

Study of Survey of India topographical maps- classification and scale: Interpretation of S01 topo-sheets of a hilly and a plain area of India in respect of relief, drainage, settlement and communication pattern; Field work: Select any area near the Institution; collect topo-sheets of the area-1: 50,000 scale; Visit the area and identify the landforms, settlements, land use features and compare the same with the topo-sheets. Draw sketches and maps of the selected area.

Unit III

Map Projections: general principles, classification. Drawing graticules on the following projections by graphical and mathematical methods: Simple Cylindrical projection, Cylindrical Equal Area Projection, Mercator Projection, Conical Projection with one standard parallel, Conical projection with two standard parallels, Gnomonic Projection and Orthographic Projection

Unit IV

Types of cartographic symbols and their uses: Points (dots, proportional circles and spheres), Line, (isopleths and flow lines), Areas (Choropleth); Use of line and bargraphs for representing population, agriculture, industry and transport data; Representation of population (distribution, density, growth etc.)

Recommended Readings:

1. Misra, R.P. and Ramesh, A.(1986): **Fundamentals of Cartography**, McMillan Co., New Delhi
2. Pal, S.K.(1998): **Statistics for Geoscientists — Techniques and Applications**, Concept, New Delhi
3. Robinson, A.H. et al.(1995): **Elements of Cartography**, John Wiley & Sons, U.S.A.
4. Sarkar A. K.(1997): **Practical Geography: A Systematic Approach**, Oriental Longman, Calcutta
5. Singh, R.L. and Dutt, P.K.(1979): **Elements of Practical Geography**, Kalyani Publishers, New Delhi
6. Monkhouse, F.J. & Wilkinson, H.R.(1994): **Maps and Diagrams**, Methuen, London
7. Singh, R.L.: **Elements of Practical Geography**, Kalyani Pub., New Delhi.
8. Steers, J.A.: **Map Projections**, University of London Press, London.
9. Khan, Z.A.(1998): **Text Book of Practical Geography**, Concept, New Delhi

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- YUVA School Life Skills Programme: Handbook for Teachers, Vol. I – IV, (2008), Department of Education and State Council of Educational Research and Training, Delhi
- Tull, M., Post Traumatic Stress (PTSD), How to Monitor Your Emotions and Increase Emotional Awareness <http://ptsd.about.com/> Accessed 30/01/2010.
- A Life Skills Program for Learners in Senior Phase. (2002). University of Pretoria. Chapter in Thesis. Retrieved from: <http://www2.ed.gov/offices/OVAE/AdultEd/OCE/SuccessStories/success.pdf>
- Life Skills Based Education. (2011). Wikipedia. Retrieved from: http://en.wikipedia.org/wiki/Life_skills-based_education
- Life Skills Based Education CCE. (2009). CBSE. Retrieved from: http://www.cbse.nic.in/cce/life_skills_cce.pdf
- Ministry of Education. (2006). Senior Secondary Phase. Republic of Namibia. Retrieved from: <http://www.nied.edu.na/publications>

SEMESTER-III

GENERIC ELECTIVE COURSE

Yoga Education

SAHS ED 01 03 02 GE 4004

Total -4 Credits (THEORY-2 Credits+ PRACTICAL-2 Credits)

Course Objectives: After studying the course students will be able

- ☐ To enable to know the historical and philosophical background of Yoga
- ☐ To popularize yoga education among the masses.
- ☐ Promoting health awareness towards holistic approach of health.
- ☐ To promote preventive measures for sound health.
- ☐ To acquire the skills for physical fitness, learn correct postural habits
- ☐ To enable them to apply Yogic knowledge in educational and stress related situations.
- ☐ To acquaint and create interest for the major Yogic practices and meditations

Theory-2 Credits

Unit 1: Historical Development, Philosophy and importance of Yoga (1 credit)

- ☐ Meaning of Yoga & its importance
- ☐ Understanding yoga. - Yoga as a way to healthy and integrated living
- ☐ Ashtanga Yoga of Patanjli (Eight-limbed practice of Yoga)
- ☐ The Streams of yoga and characteristics of Yoga Practitioner
- ☐ Renowned Yoga Centers- History, activities and contribution to Yoga

Unit 2: Applied Yoga (1 credit)

- ☐ Yogic Concept of Holistic Health and Constituents of Balanced diet
- ☐ Formation of Yoga practice module for various age groups

☐ Effects of Yogic practices - Yoga for concentration, Yoga for solution of Frustration, anger, Conflict and depression, Yoga for health, Yoga for personality development, Yoga for stress management, Yoga for memory development

Practical Work: 2 Credits

UNIT-1 (1 credit)

- A) Preparing a Workbook on mentioned Yogic activities (selected Asanas with their effects on Human Body, Mind, Senses and Intellect.)
- B) Preparation of an album related to your participation in various yoga activities (showing your own pictures in action).
- C) Each Student will be assigned to prepare and teach two lessons on different aspects of Yoga in nearby school.
- D) Participation in yoga events-Yoga week, Seminar, Workshop, Exhibition, Quiz etc.

UNIT-11 (1 credit)

Practice of Followings:

(i) -PRAYER

Learning and performing of basic yogic activities, asanas and pranayam, Kriyas.

Yogic Exercises -Surya Namasakar

Kriya -Jal Neti

Asanas : Practice all and (For Final practical Participate in any four Asanas selecting one from each categories + two Pranayama of the following:

A. STANDING POSE 1. Tadasana, 2.. Konasana , 3. Natraj asana.

B. SITTING POSE-1. Vajrasana 2. Vakrasana 3. Paschimottan asana

C. LYING POSE (SPINE FACING GROUND)

1. Sarvangasana 2. Halasana 3. Uttanpadasana

D. LYING POSE (STOMACH FACING GROUND)

1. Bhujangasana, 2. Shalabhasana 3. Dhanurasana 4. Makarasana

Pranayama- Correct Breathing Exercise, Anulome-vilom, Kapalbhati, Bhramari, Ujjayi, Bhastrika and Bhramari

Reference Books:

- ☐ Bijlani, Ramesh. (2010). Back to health through Yoga. New Delhi, Rupa & Co
- ☐ Brahmachari, Swami Dharendra Yogic, Sukshma Vyayama, Dharendra Yoga Publications, New Delhi. Brahmachari, Swami Dharendra Yogasana Vijnana, Dharendra Yoga Publications, New Delhi.
- ☐ Basavaraddi, I.V. & Others, (2011) Yogasana, A Comprehensive description about Yogasana, MDNIY, New Delhi,.
- ☐ Basavaraddi, I.V. & Others (2011) Yogic Sukshma Evam Sthula Vyayama, MDNIY, New Delhi,.
- ☐ Iyengar, B.K.S. (2008). Light on Yoga. New Delhi, Harper Collins.
- ☐ Iyengar, B.K.S. (2009). The Tree of Yoga. New Delhi, Harper Collins.
- ☐ NCERT. 2015. Yoga: A Healthy Way of Living, Secondary Stage, New Delhi
- ☐ NCERT (2015). Yoga: A Healthy Way of Living, Upper Primary Stage, New Delhi.
- ☐ NCTE. 2015. Yoga Education-Bachelor of Education Programme, New Delhi.
- ☐ Ram, Swami. (1999). A Practical Guide to Holistic Health. Pennsylvania, Himalayan Institute of Yoga.
- ☐ Swami Satyanand Saraswati. 2013. "Asana Pranayama Mudra Bandha", Bihar School of Yoga, Munger
- ☐ Tiwari, O.P. Asana Why and How. MDNIY, New Delhi
- ☐ Yogasana. Gore M. M. Anatomy and Physiology of Yogic Practices.
- ☐ Swami Gitananda Giri The Ashtanga Yoga of Patanjali.

Generic Elective Courses (GECs)

Year	I	ESSENTIALS OF GUIDANCE AND COUNSELING	Credits	4 (2 Theory + 2 Practicum)
Semester	II		Course code	SOE 02 02 03GEC 2024
Learning Outcomes	After the completion of the course, students will be able to: • Integrate the fundamental principles and techniques of guidance and counselling as required during the guidance and counselling process. • Critically analyze the role of a teacher as a guide in guidance programme. • Identify various qualities of a teacher necessary for a role counsellor. • From the practical component they will learn how to administer psychological tests and prepare a case study, guidance programme for school.			
Course Content				
Unit -1	Conceptual Understanding of Guidance • Guidance: Concept, functions and fundamental principles of guidance • Need for Guidance Services in India • Types of Guidance: Educational, vocational and Personal • Role of a class teacher in Guidance programme			
Unit -2	Counselling • Counselling: Concept, difference between Guidance and Counselling • Counselling and other allied terms • Types of Counselling: Direct Counselling, Indirect Counselling, Eclectic Counselling • Teacher as a Counsellor in educational institutions			
Transaction Strategies/ Teaching Learning Process	Lecture cum discussion, use of audio-visual learning material, discussion brainstorming reflection, conduct counselling sessions, assignments on various topics, and presentation of case study of students in need of counselling, group participation and group discussions conduct of psychological tests, project work and field.			
Practicum: Select any three out of the following • Administration and interpretation of any two: Intelligence Test, Interest Inventory, Aptitude Test, Personality Test.				

- Prepare a case study of two students one general and one problem students.
- Planning/Preparing Guidance Programme for School.
- Plan a Motivational Schedule for enhancing learning.
- Create a School Development Plan for initiating a guidance and counselling programme in schools.

Suggested Readings:

- A case study of Kisumu district. *Educational research and reviews*, 5(5), 263–272. Retrieved from: <http://www.academicjournals.org/ERR>
- Ajowi, J. O., & Simatwa, E. M. W. (2010). *The role of guidance and counseling in promoting student discipline in secondary schools in Kenya*.
- Barki, B. G., & Mukhopadhyay, B. (2008). *Guidance and counselling: A manual* (10th reprint). New Delhi: Sterling.
- Chadurvethi, R. (2006). *Guidance and counseling techniques*, Chennai: S B A Book.
- Chandanpat (2018). *Guidance and counselling*. ND: Educational Publisher & Distributor.
- Chauhan, S.S. (2007). *Principle and techniques of guidance*. New Delhi: Vikas Publishing House.
- Dev, K. (2005). *Educational guidance*. New Delhi: Pragun Publication.
- Gibson, Robert L. & Mitchell, Marianne, H. (2016). *Introduction to counselling and guidance*. New Delhi: Pearson Prentice Hall in India.
- Gladding, R. (2018). *Introduction to counselling*. ND: Pearson.
- Hurlock, E. B. (2008). *Developmental psychology* (5th ed.). London: McGraw-Hill.
- Mehdi, B. (1967). *Educational & vocational guidance in India*, New Delhi: NCERT.
- Migel, J. (2001). *Counseling in careers guidance*, U S.: Open University Press.
- Nayak, A. K. (2007). *Guidance and counselling*. New Delhi: APH Publishing.
- Okum, B. F., & Kantrowitz, R. E. (2008). *Effective helping: Interviewing and counseling techniques* (7th ed.). Belmont: Thomson.
- Paterson, C.H. (1962). *Counseling and guidance in schools*, New York: Harper & Bros.
- Perry, W. (2008). *Basic counselling techniques: A beginning therapist's toolkit* (2nd ed.). Bloomington: Author House.
- Pesricha, P. (1976). *Guidance & counseling in indian education*, New Delhi: NCERT.
- Roeber, E. & Smith, G. D. (1955). *Organisation and administration of guidance programmes*, New York: McGraw Hill Book Co.
- Shaffer, D. R., & Kipp, K. (2010). *Developmental psychology: Childhood and adolescence* (8th ed.). Belmont: Wadsworth.
- Traxler, A.E. (1961). *Techniques of guidance*, New York: Harper & Bros.
- Yuksel-Sahin, F. (2009). The evaluation of counselling and guidance services based on teacher views and their prediction based on some variables. *International journal of instruction*, 2(1).

Course Title: Environment and Society

Course Code: SAHS SC 1 1 05 GEC 2002

Credits: 2

Course Objective

The objective of the course is to familiarize the students with the conceptual and theoretical perspectives related to Environment and Society.

Course Level Learning Outcomes

Upon the completion of the course, some of the learning outcomes that the students of this course are expected to demonstrate are:

1. Understanding of the different types of environmental issues and problems.
2. Identify the diverse theoretical perspectives and conceptual issues in environmental Sociology.
3. Understanding of the different theoretical perspectives of scholars on environmental concerns.
4. Elaborate on the issues pertaining to development and sustainability.

Unit I: Environmental Sociology:

The Rise, Decline and Resurgence of Environmental Sociology

Environmental Discourse: The trajectory of social ecology, Global Environmental problem.

Unit II: Classical Sociological Tradition

Marx, Durkheim and Weber on Environmental Concerns; R. Mukherjee and Ramachandra Guha; Elements and Basic Categories of Social Ecology

Unit III: Environmental Issues and Problems: Population, Water, Sanitation, Energy, Housing, Urban development and rural poverty.

Unit IV: Environment and Interest Groups: Issues and Concerns in the context of Nationhood and State; issues pertaining to Development and Sustainability as Social Change; emergence model of Environment and Society.

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Suggested Readings

- Agrawal, Arun & K. Sivaramakrishnan (ed.), 2001. *Social Nature: Resources, Representations and Rule in India*. New Delhi: OUP.
- Barry, Commoner, 1971. *The Closing Circle: Nature, Man and Technology*. New York: Random House Inc.
- Brara, Rita. 2003. 'Ecology and Environment' in Veena Das (Ed.) *The Oxford India Companion to sociology and social anthropology*.
- Chaudhary, Sukant K., 2014. *Sociology of Environment*. New Delhi: Sage Publications
- Dave & Katewa, 2012. *Textbook of Environment Studies*, New Delhi: Cengage Learning India.
- Descola, Philippe and Gisli Palsson. 1996. *Nature and society. Anthropological perspectives*. Routledge; London.
- Eugene. 1989. *Foundations of environmental ethics*. Prentice Hall; New Jersey.
- Franklin, Adrian, 2002. *Nature and Social Theory*. London: Sage.
- Giddens, Anthony, 2013. *Sociology*. New Delhi: John Wiley and Sons.
- Goldfrank, Walter, David Goodman, and Andrew Szasz (Ed.), 1999. *Ecology and the world- system*. Greenwood Press: London.
- Gosling, David, 2001. *Religion and Ecology in India and South Asia*. Routledge.
- Grove, Richard, Vinita Damodaran and Satpal Sangwan (Ed.), 1998. *Nature and the orient*. OUP: New Delhi.
- Guha, Ramachandra (ed.), 1994. *Social ecology*, New Delhi: OUP.
- 2000. *Environmentalism: A Global History*. New Delhi: OUP.
- Guha, Sumit, 1999. *Environment and Ethnicity in India 1200-1991*, Cambridge: Cambridge University Press.
- Hughes, Jonathan, 2000. *Ecology and Historical Materialism*, Cambridge University Press; Cambridge.
- Jeffery, Roger and Nandini Sunder (ed.), 1999. *A New Moral Economy for India's forests?: Discourses of Community and Participation*, New Delhi: Sage.
- Martell, Luke, 1995. *Ecology and Society: An Introduction*. U. K.: Polity Press. Mukherjee,
- Radhakamal, 1942. *Social Ecology*. London: Longmans.

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GLOBAL ENVIRONMENTAL ISSUES

UNIT-I: Environmental Issues and Movements

Creation of UNEP and its role, UNFCCC, Convention on Climate Change, CoPs, CDM, Convention on Conservation of Antarctic Marine Living Resource, Global and national movements of Significance impact: Green Belt movement, Green Peace, Chipko movement, Narmada Bachao Andolan, *Urja gram*, *Beej Bachao Andolan*, Silent valley- Doon valley and related issues / case studies

UNIT-II: Climate change

Sea level Change- primary and secondary impacts- Adapting to Sea level changes. Global Warming and Greenhouse gases- Global and national scenario. National Action Plan on Climate Change (NAPCC), Intergovernmental Panel for Climate Change (IPCC), Climate Change and Biodiversity loss.

UNIT-III: Nuclear issues

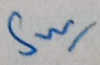
Nuclear issues, Nuclear power, Nuclear weapons, Nuclear and radiation accidents, Nuclear safety, High-level radioactive waste management.

UNIT-IV: Contemporary issues

Green Buildings, Genetic pollution, Genetically modified food controversies, Intensive farming Monoculture, Health and Diseases- Epidemics and Famines.

REFERENCES

1. Asthana, D.K. and Asthana, M. (2003). Environment: Problems and Solutions, , S. Chand & Co., New Delhi
2. Burroughs, W.J. (2007). Climate Change: A Multidisciplinary Approach. 2nd Edition. Cambridge University Press.
3. Cunningham, W. P. and Cunningham, M. A. (2004) Principles of Environment Science. Enquiry and Applications. 2nd Edition, Tata McGraw Hill, New Delhi.
4. Divan, S. and Rosencranz, A. (2001). Environmental Law and Policy in India: Cases, Materials and Statutes, Oxford University Press, New Delhi.
5. Goel P. K and Sharma K. P. (1996). Environmental Guidelines and Standards in India, Techno Science Publications, Jaipur.
6. Harris, F. (2004). Global Environmental Issues. Wiley & Sons, Inc., USA.
7. McCormick, J. Reclaiming paradise: The Global Environmental Movement
8. Singh, J.S., Singh, S.P. and Gupta, S.R. (2006). Ecology, Environment and Resource Conservation. Anamaya Publishers, New Delhi, India.


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**Elective Course offered by the department to students of other
departments
SEMESTER - II
Environmental Chemistry**

**Elective Course code - SCS CH 1210 GE 4004
60 Hrs (4Hrs /week)**

Credits: 4

Unit-I: General aspects of environment

Environmental segments: Atmosphere, Hydrosphere, Lithosphere and Biosphere. Vertical structure of the atmosphere. Green house effect: global temperature and acid rain. Ozone depletion: ozone layer formation, reactions, role and ozone depletion processes. Consequences of ozone depletion.

Unit-II: Environmental pollution and toxicology

Types and classification of pollutions. Pollution control techniques. Contaminants and their natural pathways into atmosphere. Toxicology of inorganic and organic compounds. Reactions and fate of Hazardous waste. Chemical methods of treatment for hazardous waste.

Unit-III: Green Chemistry and Industrial Ecology

Principle of green chemistry. Waste prevention. Renewable feedstocks. Industrial ecology: Major components of industrial ecosystem, Environmental impact in industrial ecology, Industrial waste reduction and minimization methods.

Unit-IV: Climate change

Consequences, predications and adapting to climate change. International response to climate change: Montreal protocol, Rio de Janeiro summit, Kyoto protocol, ONG Earth summit, Copenhagen summit and Paris climate accord.

Books suggested

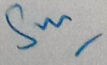
1. Environmental Chemistry, Manahan S. E., 3rd edition, CRC Press, 2009.
2. Environmental Science, Technology, and Chemistry, Manahan S. E., CRC Press, 2000.
3. Fundamentals of Environmental Chemistry, Manahan S. E., CRC Press, 2001.
4. Understanding Our Environment An Introduction to Environmental Chemistry and Pollution, Harrison, R. M., 3rd edition, RSC, 1999.
5. Environmental Chemistry, De A.K.; Fourth Edition; New Age International Pvt. Ltd., New Delhi, 2003.


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Generic Elective Course (GEC)

Year	II	PEACE EDUCATION	Course Credits	4
Semester	III		Course code	SOE 02 03 05 GEC 3104
Learning Outcomes	After completion of the course, the students will be able to:			
	• Explain the concept of peace from different perspectives and critically appraise the ideas of thinkers pertaining to peace. • Explain the concept of peace education and critically appraise the role of various agents in promoting peace education. • Explain the various aspects of conflict and evaluate the role of peace education in conflict management. • Select various techniques and approaches for teaching peace Education.			
Course Content				
Unit -1	Introduction to Peace			
	• Concept, importance and Approaches of Peace • Ideas of distinguished thinkers about Peace: Mahatma Gandhi, J. Krishnamurthy, Swami Vivekananda, Rabindranath Tagore • Challenges to peace: Stress, conflicts, crimes, terrorism, violence and poor quality of life • Peace in the context of individual, Social, National and International perspectives			
Unit -2	An Overview of Peace Education			
	• Peace Education: Concept and Scope • Needs and Importance of Peace Education in contemporary Society • Role of Family, school and Society in the development of values for Peaceful coexistence • Role of UNESCO in promoting Peace Education			
Unit -3	Conflict Management and Peace Education			
	• Conflict: Concept, Types and Process • Conditions of conflicts: limited resources, poverty, socio economic conditions • Techniques of conflict Resolution • Role of Peace Education in Conflict Management			
Unit -4	Approaches and Techniques of Teaching Peace Education			
	• Yoga and Meditation			

Scheme and Syllabus of B.Ed. Programme w.e.f. Academic Session 2021-22


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	• Role Playing, Storytelling • Group activities (literary activities, games & sports, service activities) • Counseling and co-curricular activities
Transaction Strategies/ Teaching Learning Process	Lecture cum discussion, Tutorials, Brainstorming Session, Use of PPTs, Assignments on different key areas of Peace related issues.

Practicum:

- Seminar and group discussion on importance peace in the class.
- Chart preparation on various Peace Education topics.
- Reflection on various conflicts in day-to-day life.
- Organize mock activities on working of UNO for Peace Education.

Suggested Readings:

- Arulsamy, S. (2016). *Peace and value education*. New Delhi: Neelkamal Publication.
- Barash, P. David (2000). *Approaches to peace*. New York: Oxford University Press.
- Charles, K., & Selvi, A. (2016). *Peace and value education*. New Delhi: Neelkamal Publication.
- Gandhi, M.K. (1944). *Non-violence in peace and war*. Ahmedabad: Navajivan Publishing House.
- Kapani, M. (2000). *Education in human values – concept and practical implications*. New Delhi: Sterling Publishers.
- National Curriculum Framework (2005). *National Focus group on Education for Peace*. New Delhi: NCERT.
- Pandey, S. (2004). *Education for peace, self-instructional package for teacher education*. New Delhi: NCERT.
- UNESCO (2001). *Learning the way of peace, "a teacher guide to education for peace"*. UNESCO.

Web Resources:

- *Education for Peace*. Retrieved from http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/education_for_peace.pdf
- *Peace Education*. Retrieved from www.bdu.ac.in/cde/docs/ebooks/B-Ed/II/PEACE%20EDUCATION.pdf

Scheme and Syllabus of B.Ed. Programme w.e.f. Academic Session 2021-22

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Year	I	PERFORMING AND VISUAL ARTS	Credits	4 (2Theory+ 2 Practical)
Semester	II		Course code	SOE 02 02 04 GEC 2024
Learning Outcomes	After the completion of the course, students will be able to: ● Explain of Visual art and its various dimensions. ● Illustrate the different areas of Performing Art and organize various activities. ● Plan and design various creative Art. ● Organize and dramatize various Performing Art and integrate technology in art.			
Course Content				
Unit -1	Introduction of Visual Arts (Theory) ● Visual Art: Concept, Scope, Elements, Importance and Aesthetics ● Colour: Concept and Classification ● Advertising: Concept of Advertising, its Importance in Indian context ● Understanding of Folk and Tribal Arts			
Unit -2	Introduction of Performing Arts (Theory) ● Acting according to Natyashastra ● Concept of Direction and Design ● Introduction of Performing Arts in India (Music, Dance and Drama) ● Indian Classical Art, Forms and Narratives Arts			
Unit -3	Creative Art (Practical) ● Forms of Painting: Study of still life, Portrait, Poster, Paper Art and Collage ● Basics of Graphic Design and Calligraphy ● Folk and Tribal Arts: Pithora, Kalamkari and Gond Painting ● Making of Advertising ideas & posters			
Unit -4	Acting, Direction, Design Technology and Play Production (Practical) ● Acting (Rasa & Bhava), Acting Performance with Voice, speech and Body Movements ● Dance and use of body movements ● Stage Craft, Direction & Design Technology			

Transaction Strategies/ Teaching Learning Process	• Performance based on Mime, Storytelling & Role Play Hand on experience of working in different mediums and materials, preparation and presentation of teaching learning materials, slide/film show, group work planning of a stage-setting, visit, role play, celebrations of Indian festivals and fairs, brain-storming, interaction with artists, lectures and demonstration.
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Practicum:

- Making of Study of still life, Portrait, Poster (Social Activist), Paper Art, Collage, Graphic Design, Calligraphy, Waste Utilization, Folk and Tribal Arts: Pithora, Kalamkari and Gond Painting, Advertising posters.
- Acting (Integration of Performing Arts in Education), Direction, Stage Craft & Design Technology.

Suggested Readings:

- Chandok Amargeet (2016), *Art and Education*, Delhi: Bookman.
- Chaturvedi Snehlata (2016), *Art Education*, Delhi: Bookman.
- Chauhan Rita (2016), *Drama, Art and Education*, Agra: Agrawal Publications, Sanjay Place.
- Chetan Bharti (2016), *Drama and Art in Education*, Kalyani Publishers.
- Gill Rajesh (2017), *A Textbook of Art Education*, New Delhi: Paragon International Publishers.
- Gill Rajesh (2018), *Art Education*, New Delhi: Paragon International Publishers.
- Jain Ritu (2016), *Art Education*, Delhi: Bookman.
- Kakkar Rekha, Makkhar Ragini (2018), *Drama, Art and Aesthetics in Education*, Agra: Rakhi Prakashan.
- Kumar Rajender (2016), *Drama and art in education*, Rajasthan: Jain Prakashan Mandir.
- Raw K. Ravikant and P. Ananad Kumar (2017), *Drama and Art in Education*, Neelkamal.
- Roy Reeta (2017), *Perfect Art Education*, Arya: Publisher Company.
- Saxena Avnish and Sirth Sushil (2016), *Drama, Art and Aesthetics in Education*, Agra: Rakhi Prakashan Raman Tower, Sanjay place.
- Sharma R. P., Sharma R. K. (2016), *Drama and Art in Education*, Agra: Radha prakashan mandir.
- Singh Chitralekha (2016), *Drama and Art in Education*, Agra: Publisher Shri Vinod Pustak Mandir.
- Singh Yadav Narendra (2010), *Advertising Technical and Theory*, Rajasthan: Rajasthan Hindi Granth Academy, Jaipur.
- Singh Yadav Narendra (2012), *Graphic Design*, Rajasthan: Rajasthan Hindi Granth Academy, Jaipur.

Elective Course offered by the department to students of other departments

**SEMESTER – III
Basics of Medicinal Chemistry**

**Elective Course code - SCS CH 1410 GEC 4004
60 Hrs (4Hrs /week)**

Credits: 4

UNIT I: Fundamentals

Historical development of systems of medicine, Basic chemical and biochemical principles, Key definitions, drug, target, receptors, enzymes, common drugs and their classification, anti-inflammatory drugs, antihistamines, antacids, antibiotics, narcotics, antivirals, and antineoplastics.

UNIT II: Drug Action

Chemistry of drug-target interactions, bioavailability, drug absorption, distribution, metabolism, excretion (ADME), pharmacokinetics and pharmacodynamics, toxicity, side effects, lipophilicity and hydrophilicity, blood-brain barrier and its significance, routes of drug administration

UNIT III: Drug Design and Synthesis

Development of new drugs, concept of lead compounds and lead modifications, structure-activity relationship (SAR), isosterism, bio-isosterism, important chemical principles behind design of drugs, natural products and their uses, chemical synthesis of drugs, drug formulation, drug delivery, photodynamic therapy.

UNIT IV: Drugs and Society

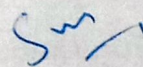
Regulatory processes for drug approval, regulatory agencies, intellectual property, patents, drug misuse, drug abuse, abuse of antibiotics, fraud practices in treatment, historically important drugs and vaccines

Books Suggested

1. An Introduction to Medicinal Chemistry, 5th Edition, G. L. Patrick, Oxford University Press, 2013.
2. Wilson and Gisvold's Text Book of Organic Medicinal and Pharmaceutical Chemistry, Ed Robert F Dorge, 12th Edition, 2010.

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3. An Introduction to Drug Design, 1st Edition, S. S. Pandeya and J. R. Dmmock, New Age International, 1999.
4. Burger's Medicinal Chemistry and Drug Discovery, Vol. 1, 7th Edition, Ed. M E Wolff, John Wiley, 2010.
5. The Organic Chemistry of Drug Design and Drug Action, 3rd Edition, R. B. Silverman, Academic Press, 2014.



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M.Sc. (Microbiology)
(SEMESTER-II)
SIAL MB 01 02 03 GEC Food Microbiology

Unit I

Food and Microorganisms - Historical developments, Microorganisms important in food - Molds, yeast and bacteria - general characteristics, classification and importance; Factors affecting growth of microorganisms - Nutrient content, inhibitory substances and cell structures.

Unit II

Spoilage of different foods - Microorganisms associated with plants, soil, animals, water and air; Chemical composition of various foods and their spoilage- Vegetables, fruits, cereals, sugar and its products, milk and its products, meat and meat products, poultry, fish and sea foods. Principles of Food preservation - Types of preservation methods used – Physical, Chemical and Biological.

Unit III

Food fermentation - Production methods of bread, cheese, fermented vegetables and dairy products; Production of vinegar, wine, beer and oriental fermented foods on industrial scale, Microbes as a single cell protein (quorn and pruteen); Production of Mushroom and some indigenous Indian fermented foods.

Unit IV

Food borne infections and intoxications - Bacterial and non-bacterial infection - *Brucella*, *Bacillus*, *Clostridium*, *Escherichia*, *Salmonella*, *Shigella*, *Staphylococcus*, *Vibrio*, *Yersinia*, fungi, viruses, nematodes and emerging food-borne pathogens; Foodborne outbreaks; Laboratory testing procedures and preventive measures; Food sanitation in manufacture and retail trade.

Suggested Readings:

1. Adams MR, Moss MO (2005). Food Microbiology; 2nd edition, Royal Society of Chemistry Publication, Cambridge.
2. Frazier WC, Westhoff DC (2007). Food Microbiology, Tata McGraw Hill Publishing Company Ltd, New Delhi.
3. George J Banwart (1989). Basic Food Microbiology, AVI publication, New Delhi.
4. Jay JM (2008). Modern Food Microbiology, 6th edition, Aspen Publishers, Inc, Gaithersburg, Maryland.
5. Peppler HJ, Perlman D (1979). Microbial Technology, 2nd edition, Academic Press, USA.
6. Ray B (2005). Fundamental Food Microbiology, 3rd edition, CRC Press, New York, USA.

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M.Sc. (Microbiology)
(SEMESTER-I)
SIAL MB 01 01 01 GEC Introduction to Microbiology

Unit I

History and Development of various fields of Microbiology in 20th century; The spontaneous generation vs Biogenesis of microorganisms; Microbes - causative agents of disease; Microbes- fermentation and putrefaction; Preparation of microbiological media; Physical and chemical methods of sterilization. Microscopy - Light and Electron Microscopes.

Unit II

Microbial classification - Haeckel's classification- lower and higher protista; Woese's three kingdom classification systems - Archaea, Eubacteria, Eukarya; Organization of archaea, bacteria and eukaryotic cell; Different types of acellular microorganisms- Viruses, viroids and prions.

Unit III

General features and classification of Bacteria, Algae, Fungi and Protozoa; Bacterial growth and metabolism; Photosynthetic bacteria; Photoheterotrophs; Chemolithotrophs and Chemoheterotrophs; Microbes in Extreme Environment - Characteristic features of the thermophilic, methanogenic and halophilic archaea; Microbes in other extreme conditions - Deep ocean, arctic and antarctic region and space.

Unit IV

Scope of Microbiology - Cycle of matter in nature; Microbial interactions - Symbiosis and parasitism; Biodegradation and Bioremediation; Biofilms; Microbes in composting; Biofertilizers and Biopesticides; Microbes and Industry - SCP, microbial enzymes and fermented foods. Human diseases and their causative agents; Vaccines and antibiotics; Phytopathogenic bacteria.

Suggested readings:

1. Brock TD (1961). Milestones in Microbiology, Infinity Books.
2. Madigan MT, Martinko JM, Parker J (2015). Brock Biology of Microorganisms, 14th edition, Pearson Education Ltd, Prentice-Hall, Englewood Cliffs, NJ, Inc USA.
3. Pelczar MJ, Chan ECS, Kreig NR (1993). Microbiology: Concepts and Application, 5th edition, Tata McGraw Hill, New Delhi.
4. Stainier RY, Ingraham JL, Wheelis ML, Painter PR (1976). General Microbiology, 4th edition, MacMillan, New Jersey, USA.

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General Elective Courses

Paper Nomenclature: **Basic Economics**

Course Code: **SAHS ECO 01 101 GE 3104**

(Credit: 4)

Objective: *The objective of this course is to enrich knowledge of the students of non economic background.*

Unit-I

Microeconomics: Economics-Meaning, Nature and Significance, Central problems of an economy: what, how and for whom to produce; concepts of production possibility frontier and opportunity cost, concept of utility and consumer's equilibrium, law of diminishing marginal utility, demand and supply concept with their shifts in curves, concept of elasticity (price & income) and factors affecting price and income elasticity, basic concept of cost ; total, fixed & variable cost, marginal , basic concept of revenue ; Revenue - total, average and marginal revenue - meaning and their relationships, definition of markets : perfect competition , imperfect competition and monopoly.

Unit-II

Macroeconomics: Some basic concepts: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation, Concept of national income including GDP, NNP, NDP, factor cost, and market cost, Concept of Disposable Income (gross and net), Private Income, Personal Income and Personal Disposable Income, Money; concept and functions. Concepts and function of central bank. Concept of budget, Concept of monetary and fiscal policy.

Unit-III

Growth and Development: Concept of growth, concept of development, different between growth and development, determinants of economic growth and development, different economic system, role of government in economic growth and development, Role of education, knowledge, and governance in economic development; trade and development, concept of sustainable development, characteristics of underdeveloped countries, Concept and measures of poverty; head count ratio, income gap ratio.

Unit-IV

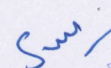
International Economics: International economics- meaning and subject matter, relevance of international economics in present, international trade and its role in economic development, introduction of world's fastest economies, Basic concepts of absolute and comparative advantage theory, concept & role of FDI, FII and MNCs in economic growth, Introduction of international organizations; WTO, IMF, World Bank.

Recommended Readings:

1. A. Koutsoyiannis. (1979), '*Modern Microeconomics*', International Edition, Palgrave Macmillan.
2. Varian, Hall R. (1992), '*Microeconomic Analysis*' 3rd edition, W.W. Norton & Company, New York.

Syllabus Booklet

3. Pindyck, R.S., Rubinfeld, D.L. and Mehta, P.L., (2015), 'Microeconomics', 8th edition, Prentice Hall.
4. Mankiew, G, N, 'Principles of Macroeconomics', 9th edition, Macmillan Learning.
5. Dornbusch, R., Fischer, S and Startz, R., (2015), 'Macroeconomics', 11th edition, McGraw Hill.
6. Blanchard, O., 'Macroeconomics', 4th Edition, Prentice Hall.
7. Todaro, M.P. and Smith, S.C., 'Economic Development', 8th edition, Pearson.
8. Thirawall, A., 'Growth and Development', Macmillan Publication.
9. Ray, D., (1998), 'Development Economics', Princeton University Press.
10. Salvatore, D., and Reed, (2013), 'International Economics' 11th edition, Wiley.
11. Soderston, B.O. (1991), 'International Economics', Macmillan.


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Elective Course offered by the department to students of other departments

**SEMESTER - I
Chemistry of Materials**

**Course Code - SCS CH 1110 GE 4004
60 Hrs (4Hrs /week)**

Credit: 4

UNIT I: Structures and properties of solids

- 1) Introduction, crystalline and amorphous solids, Unit cell, Bravais lattices, structure of NaCl and KCl, point defects – Frenkel, Schottky defects and non-stoichiometric defects.
- 2) Conductors, variation of conductivity with temperature, semiconductors, p and n types, photo voltaic cell. Piezoelectric and pyro-electrics. Photoluminescence.
- 3) Diamagnetic, paramagnetic, anti-ferromagnetic, ferro- and ferrimagnetic materials. Magnetic susceptibility, variation with temperature – Curie-Wiess law, Curie temperature and Neel temperature. Permanent and temporary magnets.

UNIT II: Hazardous and nonhazardous materials, treatment and disposal to these types of wastes

- 1) Identify the physical hazards of chemicals, and categorize chemicals according to their hazards and physical characteristics.
- 2) Define toxicity as it relates to humans and hazardous chemicals and list the elements of risk assessment.
- 3) Explain the pathways for transport of hazardous materials in various environments.

UNIT III: Nano Materials and Composites

- 1) Nano scale Regime, gas phase clusters, condensed phase, Nanoparticles. Classification of nanomaterials.
- 2) Methods of preparation. Top to down and Bottom up approach, Reduction of metal ions, Zeolite and inverse micelles and co-precipitation methods.
- 3) Composite materials: Introduction, types of fillers and matrix, classification of composite materials based on distribution and nature of fillers.
- 4) Particulate and fibrous metal/non-metal composites, polymer nanocomposites and their applications.

GENERIC ELECTIVE COURSE
Educational Management and Planning
SAHS ED 010101 GE 4004

Credits 4

No. of lectures: 48

Course Objectives: After studying the course, students will be able to

- Understand the basic concepts of Educational Administration
- Understand the various Constitutional and Legal Framework related with Education
- Understand the Institutional Mechanism for Educational Planning and Administration in India
- Understand the Role and Functions of Various Government Agencies in Education
- Understand the Current/ Emerging Issues in Educational Administration

Unit-I: Basic Concepts

- Meaning and Nature of Educational Management
- Scope of Educational Management

Unit-II: Performance and Resource Management in Educational Institutions

- Monitoring of school performance
- Performance appraisal of the teachers.
- Financial and administrative management of educational institutions.
- Nature and characteristics of resource available in education.
- Need for resource management in education.
- Material resources.

Unit III- Educational Planning

- Concept of Educational Planning
- Need and importance of Educational Planning
- Process of Educational Planning
- Educational Planning in India: Agencies and Process
- Education under Five Year Plans in India
- Appraisal of Educational Planning in India

Unit-IV: Institutional Mechanism for Educational Planning and Administration in India

- Role and Functions of Department of Culture and Education of the Union Ministry of Human Resource Development
- Role and Functions of Department of Education in States with special reference to Haryana
- Role and Functions of University Grants Commission
- Role and Functions of Technical Bodies such as NUEPA, CABE, NCERT, NCTE, SCERTs

Transaction Mode

Lecture Method, Activity based Method, Survey Method, Cooperative Learning

Assignment/Field Work/Practicum

: Institutional Based Activities, Presentations, text book Review

Suggested Readings:

- Aggarwal, D.D. (2007). Educational Administration in India. ISBN: 8176257729. www.easternbookcorporation.com/moreinfo
- Batra, Sunil (2003). From School Inspection to School Support. .
- Cambolell, R.F. and Gregg, R.T. (ed.) (1957). Administrative Behaviour in Education. Harpar
- Gupta, L.D. (1983). Educational Administration at College Level. New Delhi: Oxford and IBH.
- Kaufman, Herman, Watters (eds.) (1996). Educational Planning: Strategic Tactical Operational. Tecnomie.

NUMERICAL METHODS

(SPMMAT 01 01 02 GEC 3104)

UNIT-I

Errors in approximation, Absolute, Relative and percentage errors. Solution of algebraic and transcendental equations: Bisection method, Newton Raphson method, Systems of simultaneous Equations: Crammer's rule, Inversion method, Gauss elimination method, Gauss Jordon method, LU decomposition method, Iterative methods: Jacobi method and Gauss-Seidel method.

UNIT-II

Eigen values and Eigen vectors: Eigen values, Eigen vectors, Cayley Hamilton theorem, Power method for finding largest Eigen value. Curve fitting: Least square curve fit- Straight line fitting, parabolic curve fitting, fitting of exponential curve, fitting of other curves.

UNIT-III

Finite Differences: Forward difference, Backward difference, Central difference, Newton's forward, backward interpolation formulae, Lagrangian interpolation formula, Gauss forward, backward formulae, Stirling formula, Bessel formula.

UNIT-IV

Numerical Differentiation and Integration: Newton's forward difference, Newton's backward difference Formula for differentiation, Trapezoidal and Simpson's one third rules, Simpson's three eight rule for numerical integration, Double integrals using trapezoidal and Simpsons's rules.

Suggested Readings:

1. Jain, M. K., Iyengar, S. R. K. and Jain, R. K. *Numerical Methods for Scientific & Engg. Computation*. New Age International, 2012.
2. Atkinson, K. E. *An Introduction to Numerical Analysis*. John Wiley & Sons, 1989.
3. Conte, S. D. and Boor, C. D. *Elementary Numerical Analysis*. An Algorithmic Approach, Tata McGraw Hill, New Delhi, 1981.
4. Isacson, E. and Keller, H. B. *Analysis of Numerical Methods*. John Wiley & Sons, 1994.
5. Thangaraj, P. *Computer Oriented Numerical Methods*. PHI Learning Pvt. Ltd, 2013.

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INTRODUCTORY STATISTICS

(SPMS ST 01 101 GE 3014)

Objectives: The objective of this course is to define a variety of basic statistical terms and concepts, solve fundamental statistical problems, understanding of statistical fundamentals to interpret data.

UNIT I

Introduction to Statistical Analysis, Measures of Central Tendency: Mean, median, mode, geometric mean, harmonic mean. Measures of Dispersion: range, mean deviation, variance, standard deviation. Quartiles. Quartile deviation, coefficient of variation, measures of skewness, measures of kurtosis.

UNIT II

Random experiment, outcomes, sample space, events, classical definition of probability, random variables, probability mass function, probability density function, cumulative distribution function, mathematical expectation, Variance, Binomial, Poisson, Geometric, Exponential, Normal distributions.

UNIT III

Null hypothesis, alternative hypothesis, type I error, type II error, level of significance, p-value and power of test. Tests for mean based on normal distribution – one sample t-test, two-sample t-test, paired-sample t-test. Tests for variance based on normal distribution – one sample and two-sample problem. One-way and Two-way analysis of variance (ANOVA) techniques.

UNIT IV

Karl Pearson's correlation coefficient, Spearman's rank correlation coefficient, principle of least square, lines of regression, simple linear regression, coefficient of determination. Multiple linear regression, coefficient of multiple determination.

Suggested Readings:

1. Goon, A.M., Gupta, M.K. & Dasgupta, B. (2016). Fundamentals of Statistics, Vol. I & II. World Press.
2. Das, N.G. (2012). Statistical Methods, Vol I & II. Tata McGraw Hill.
3. Walpole, R.E., Myers, R.H., Myers, S.L. & Ye, K.E (2012). Probability and Statistics for Engineers and Scientists. Pearson.
4. Daniel, W.W. & Cross, C.L. (2012). Biostatistics: A Foundation for Analysis in the Health Sciences, 10th Edition. Wiley.

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OFFERED TO OTHER DEPARTMENTS – SEMESTER I

BUSINESS COMMUNICATION

Course Code- SLM MGT 01 101 GEC 3104

Credit: 4

Objective:

The aim of the course is to develop skills and competencies in participants to be able to communicate effectively through the written and oral medium. Sensitivity towards cross cultural communication will be developed with familiarity with global business etiquette and protocols. The pedagogical focus of the course will be workshop based with emphasis on practice and skills development.

Contents:

UNIT I

Introduction and classification of communication: purpose of communication; process of communication; importance of communication in management; communication structure in organization; barriers & gateway in communication; 7 C's of communication; Impact of cross cultural communication.

UNIT II

Employment Communication : Writing CVs & Application Letter; Group discussions; interview; types of interview; candidates preparation; Interviewers preparation; Impact of Technological Advancement on Business Communication; Communication networks, Intranet, Internet, teleconferencing, videoconferencing.

UNIT III

Written communication and Oral communication: purpose of writing, pros & cons of written communication; principles of effective writing; writing technique; business letters and reports, reports: definition & purpose; types of business reports; reports writings; oral communication; principles of successful oral communication; two sides of effective oral communication; effective listening; non-verbal communication; body language.

UNIT IV

Group communication and Meetings: need, importance & planning of Meetings; drafting of notice; agenda, minutes & resolutions of Meeting; writing memorandum; press

release;press conference;;Business etiquettes; etiquettes; telephonic & table etiquettes;
PRESENTATION SKILLS :Welements of presentation; designing a presentation,
advanced visual support for business presentation;types of visual aid, appearance &
posture, practicing delivery of presentation.

Suggested Reading:

1. Bovee, Courtland L, Thill, John V. and Abha Chatterjee (2011). *Business Communication Today*. (10th ed.). New Delhi: Pearson
2. Chaturvedi, P. D. and Chaturvedi, Mukesh (2011). *Business Communication, Concepts: Cases and Applications*. (2nd ed.). New Delhi: Pearson
3. Gupta Mukherjee, Jaba (2011). *Management Communication – A Case Analysis Approach*. (4th ed.) Noida: Pearson.
4. Lesiker, Raymond V., Flatley Marie E., Rentz, Paula and Neerja Pande (2015). *Business Communication: Connecting in a Digital World*. (13th ed.). New Delhi: McGraw Hill Education
5. O'Rourke, James S. IV and Gupta, Jaba Mukherjee (2011). *Business Communication: A Case – Analysis Approach*. (4th ed.). New Delhi: Pearson

Note: The list of cases, references and relevant articles will be provided by the faculty in the class.



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Dynamic of Housekeeping

Course Code- SLLCH THM 01 03 01 GEC 4004

Objective:-

This course deals with the theory of housekeeping operations in hotel business. Students shall learn and develop guest service skills in classes. Learners shall also be given an insight to housekeeping practices, the use and care of equipment, and tools along with their roles in various areas of professional housekeeping.

Content

UNIT-1

Introduction to Housekeeping Department

- 1.1 Introduction & functions of housekeeping department.
- 1.2 Organizational structure of housekeeping department.
- 1.3 Role & scope of housekeeping.
- 1.4 Emerging trends in housekeeping.

UNIT-2

Laundry

- 2.1 Introduction, types of laundry.
- 2.2 Process of laundry.
- 2.3 Laundry equipments & uses.
- 2.4 Introduction to stain removals & removal common stains.

UNIT-3

Cleaning in Housekeeping

- 3.1 Different types of Surfaces.
- 3.2 Cleaning and maintenance of various surfaces.
- 3.3 Cleaning agents used in housekeeping department.
- 3.4 Cleaning equipments.

UNIT-4

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Decoration & Designing

- 4.1 Concept of interior decoration in housekeeping department.
- 4.2 Concept and types of flower arrangement.
- 4.3 Concept and types of towel art.
- 4.4 Horticulture and its role in hotels.

Suggested Reading:-

- Joan C Branson & Margaret Lennox Hotel Hostel and Hospital Housekeeping, (ELBS), 2006
- Sudhir Andrews, Hotel House Keeping –Tata Mc Graw Hill, 2008
- Raghubalan, Hotel Housekeeping Operations & Management, Oxford University Press, 2008
- Jones-Housekeeping and Front Office ,Edward Publication, 1986

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SEMESTER III Paper Title: FILM APPRECIATION

SJM Jm C 13 03 GE 2114

UNIT-I

Film as medium of expression; Film Genres

Approaching Films: Semiotics, Psychoanalysis, Linguistics,

Film forms: narrative and non-narrative

UNIT-II

Film Aesthetics

Regional and National Cinema in India, Bollywood, World cinema,

Film Movements; The rise of Multiplex cinema

UNIT-III

Basic Camera shots and Movements

Film editing Principles: Mise-en-scene and montage

Diegetic and Non-diegetic elements in a film

UNIT-IV

Major film festivals and awards: Indian and Global

Writing Film reviews

Film Certification categories

Reading list

1. Eric Baranenn&Krishnaswamy; *Indian Film* (OVP, 2nd Edition, 1980).
2. KhwajaAhemad Abbas, *How films are made* (National Book Trust, 1977).
3. MaricSetton; *Film as an art and appreciation*, (NCERT, New Delhi).

4. *Cinematography Censorship rules*, (Govt. of India Press, Nasik, 1969).

Practicals

Writing Film Appreciation for 5 feature films of Bollywood and cinema from other parts of the world.

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TITLE OF THE COURSE: ACADEMIC LIBRARY SYSTEM (COMPULSORY)

COURSE CODE: SCSI LIS 01 03 05 GEC 3003

Objectives of the Course:

1. To understand the basic concept of Academic Library Systems.
2. To understand the resources sharing and networking in Academic Library.
3. To understand the Academic Library Operation.
4. To acquaint the students with the present setup of academic library system in India.

UNIT I: Role of Academic Libraries

- Concept, need, purpose, types, functions, and Present set up of Academic Libraries in India
- Role of UGC in the growth & development of Academic Libraries of higher education in India
- Committees & Commissions: Kothari Commission, Radhakrishnan Commission
- Mudaliar Commission and Accreditation Agencies: NBA and NAAC

UNIT II: Library Organization & Administration

- Library authority and its decentralization
- Manpower Development: Qualifications, recruitment, Job description, job analysis and staff manual
- Library Finance: Sources, Type of Budgets, Methods of financial estimation and budget preparation
- Collection Development: Print and Non-Print including Electronic documents

UNIT III: Organization of Library Section and Building

- Organization of Various Sections: Periodical, Technical, Reference, Circulation and Maintenance Section
- Library Buildings: Planning and Standards. Risk and disaster management
- Library furniture & equipment
- Centralized v/s Decentralized System: Departmental Libraries

UNIT IV: Resource Sharing, Networking and Policies

- Concept, need and purpose of Resource Sharing & Networking
- National Library Networks: INFLIBNET and DELNET
- National Consortia: E-Shodh Sindhu, Institutional Repositories (IR); E-Resources
- Library & Information Policy at the National and International level in India

Recommended Readings

- Brophy, Peter. (2006). *The academic library*. London: Facet.
- Budd, J. (2012). *The changing academic library: Operations, culture, environments*. 2nd ed. Chicago: Association of College and Research Libraries.
- Chapman, L. (2008). *Managing acquisitions in library and information services*. London: Facet Pub.
- Connor, E. (2008). *An introduction to instructional services in academic libraries*. New York and London: Routledge.
- Frederick, D. E. (2016). *Managing eBook metadata in academic libraries: Taming the tiger*. Amsterdam : Chandos Publishing
- Higgins, S. E., & Derakhshan, M. (2017). *Managing academic libraries: Principles and practice*. Amsterdam: Chandos Publishing.
- Jordan, P. (2017). *The academic library and its users*. Oxon : Routledge
- Mack, D. C., & Gibson, C. (2012). *Interdisciplinary and academic libraries*. Chicago : Association of College and Research Libraries
- Munde, G., & Marks, K. (2009). *Surviving the future: Academic libraries, quality, and assessment*. Oxford: Chandos.

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विद्याधनं सर्वधनप्रधानम्

तृतीय सेमेस्टर में प्रस्तावित

पाठ्यक्रम: सिनेमा अध्ययन

पाठ्यक्रम का कोड :SLLCH HND 1 3 03 GE 4004

इकाई	पाठ्यक्रम
1.	सिनेमा का उद्भव एवं विकास सिनेमा उद्योग एवं कला का संबंध हिंदी सिनेमा पर पूंजीवाद का प्रभाव
2.	आरम्भिक हिंदी सिनेमा का स्वरूप हिंदी सिनेमा का रुमानी दौर हिंदी सिनेमा का वर्तमान परिदृश्य
3.	सिनेमा में नायकत्व कि अवधारणा हिंदी सिनेमा में स्त्री एवं प्रेम वृत्तचित्र एवं सिनेमा का बदलता स्वरूप
4.	चयनित फिल्मों का प्रदर्शन एवं समीक्षा

संदर्भ पुस्तकें :

- वर्ल्ड सिनेमा (हिस्ट्री): सं. ज्योफ्री नोवेल-स्मिथ, ऑक्सफोर्डयुनिवर्सिटी प्रेस
- हिंदी सिनेमा: अनिल सारी, ऑक्सफोर्ड, दिल्ली
- लोकप्रिय सिनेमा और सामाजिक यथार्थ: जवरीमल्ल पारख, अनामिका प्रकाशन, नई दिल्ली
- सिनेमा: कल, आज, कल : विनोद भारद्वाज, वाणी प्रकाशन, नई दिल्ली
- भारतीय सिने सिद्धांत : अनुपम ओझा, राधाकृष्ण प्रकाशन, नई दिल्ली.
- हिंदी सिनेमा का इतिहास : मनमोहन चड्ढा, सचिन प्रकाशन, नई दिल्ली.
- सिनेमा और साहित्य : हरीश कुमार, संजय प्रकाशन, नई दिल्ली.
- हिंदी सिनेमा : आदि से अनंत: प्रह्लाद अग्रवाल, साहित्य भंडार,
- सिनेमा: समकालीन सिनेमा : अजय ब्रह्मात्मज, वाणी प्रकाशन, नई दिल्ली
- भारतीय सिनेमा का सफरनामा : पुनीत बिसारिया-राजनारायण शुक्ल, अटलांटिक प्रकाशन, नई दिल्ली

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GENERIC ELECTIVE COURSE-II STRESS AND HEALTH

Credits: 4 (Hrs/week: 4)

SAHS PSY 01 03 04 GEC 4004

Total: 100 marks

Internal Assessment: 30 marks

Examination: 70 marks

UNIT-I

Stress- Its meaning, Impact and Sources. Stress Cycle. Appraisal of Stress. Coping Styles

Model of stress- GAS Model, Transaction Model, The Fight or Flight Response (Stress and Physiology)

UNIT-II

Stressors- Physical, Social, Biological, Familial and Psychological (Biopsychosocial Aspects).

Life Events and Daily Hassles. Habits and Stress. PTSD. Hardiness.

UNIT-III

Illness- Cardiovascular, Digestive, Musculoskeletal and Immune system.

Stress and Mental Health. Stress and Cancer

UNIT-IV

Assertiveness Training, Communication Skills and Time Management

Meditation and Visualization, Vipasana, Relaxation Techniques and Yoga.

Recommended Books:

1. Brehm, A. Barbara (1998): Stress Management: Increasing Your Stress Resistance. Pearson, New Delhi.
2. Sarafino, E.P. & Smith, T.W. (2012): Health Psychology: Biopsychosocial Interactions. Wiley, New Delhi.
3. Komoroff, A. L. (2008): Stress Management: Approaches for Preventing and Reducing Stress. Boston, Harvard University, Harvard Health Publication.
4. Lovallo, W.R. (2016) 3rd Edit: Stress & Health: Biological and Psychological Interactions. Sage Publication, Oklahoma, USA.

5. King, C.A.M(1975): **Oceanography for Geographers** E. Arnold, London
6. Sharma, R.C. and Vatel M. (1970): **Oceanography for Geographers**, Chetnya Publishing House, Allahabad
7. Shepard, F.P. (1948): **Submarine Geology**, Harper & Sons, New York
8. Thurman, H.B. (1984): **Introductory Oceanography**, Charles Webber E. Merrill Publishing Co.
9. Weisberg, J. and Howard(1976): **Introductory Oceanography**, McGraw-Hill Book Co., New York, 1976

M.Sc. Geography Semester I
Course Title – Introduction to Cartography
Course code- SEE GEO 1 1 03 GE 2114

Course Outline

Credit - 4

Unit I

The nature and scope of cartography; Scale: Types of Scale; Map - types of maps. Methods of showing relief; Representation of different landforms by contours; Representation of temperature, pressure and rainfall data.

Unit II

Study of Survey of India topographical maps- classification and scale: Interpretation of SOI topo-sheets of a hilly and a plain area of India in respect of relief, drainage, settlement and communication pattern; Field work: Select any area near the Institution; collect topo-sheets of the area-1: 50,000 scale; Visit the area and identify the landforms, settlements, land use features and compare the same with the topo-sheets. Draw sketches and maps of the selected area.

Unit III

Map Projections: general principles, classification. Drawing graticules on the following projections by graphical and mathematical methods: Simple Cylindrical projection, Cylindrical Equal Area Projection, Mercator Projection, Conical Projection with one standard parallel, Conical projection with two standard parallels, Gnomonic Projection and Orthographic Projection

Unit IV

Types of cartographic symbols and their uses: Points (dots, proportional circles and spheres), Line, (isopleths and flow lines), Areas (Choropleth); Use of line and bargraphs for representing population, agriculture, industry and transport data; Representation of population (distribution, density, growth etc.)

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Offered to other Departments:

Paper-V Code: (SSHPOS01 (105) GE4004)

Semester-I

Indian National Movement

Unit-I

Colonialism in India

National Movement

Unit-II

Peasant Movement

Labour Movement

Unit-III

Revolutionary Movement

The rise and growth of communalism

Unit-IV

An economic critique of Colonialism

Freedom and Partition

Constitutional development

Suggested Readings:

- Bipin Chandra (1971), *Modern India*, New Delhi
- Subhas Kashyap, *Swatantrta Aandolan ka Itihas*, National Book Trust India, New Delhi. (Hindi)
- Vipin Chandra, *Bharat ka swatantrta Sangharsh*, Hindi Madhayam Karyanayan Delhi University, Delhi. (Hindi)
- B L Grower, Yashpal, *Bhartiya Swatantrta Sangram tatha Sambaaidhanik Vikas*, S Chand & Company, Ltd New Delhi. (Hindi)
- Sumit Sarkar, *Aadhunik Bharat (1885-1947)* Rajkamal Prakashan, New Delhi. (Hindi)
- Tara Chand (1961), *History and Freedom movement in India*, New Delhi
- R. Palme Dutt (1949), *India Today*, Bombay

- A.R. Desai (1959), *Social Background of Indian Nationalism*, Bombay
- Sumit Sarkar (1983), *Modern India, 1885-1947*
- R.C.Dutt (1960), *The Economic History of India Under British Rule*, Delhi
- Bipan Chandra (1984) *the Rise and Growth of Economic Nationalism in India*, New Delhi.
- B.N.Ganguly (1977) *Indian Economic Thought- Nineteenth Century perspectives*, New Delhi.
- Arun Chandra Guha (1971) *First spark of revolution*, Bombay
- Percival Spear (1974), *Oxford History of India*, New Delhi.
- Bipan Chandra (1987), *India's Struggle for Independence*, Penguin Books, New Delhi
- Mushirul Hasan (1981) *Communal and Pan Islamic Trends in Colonial India*, Delhi.


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LL.M. SEMESTER – I

Course – V: Intellectual Property Rights

SLM LAW 01 102 E 4105

Objectives:

The main aim of this course is - (a) to examine the definition and legal basis of IPRs in its broadest sense including patents, copyrights, trademarks, geographical indications, and designs; (b) to study the evolution of IPRs as an international legal norm and its implications at the global level with specific focus on the concerns of developing countries, including India. (c) to study the emerging new interpretations and consequent implementation issues relating to IPRs within multilateral and regional treaty framework and to examine and identify the conceptual and jurisprudential aspects with specific focus on cases and case studies at the national and international level. (d) to understand the implications of emerging global IPR regime on frontier research areas such as traditional knowledge, biodiversity, biotechnology, digital/computer technology, internet and domain names.

UNIT – I: Understanding Intellectual Property Rights

- Concept, Kinds and Evolution of IPR, Changing Dimensions of IPR, Globalization and IPR
- TRIPs and IPR Regime – the context, genesis and implementation issues
- WTO and Dispute Settlement Mechanism
- Enforcement of IPRs – civil, criminal and administrative remedies

UNIT – II: Law of Trademarks and Geographical Indication

- Introduction to Trade Marks Law
- Registrations of Trade Marks: Requirements for Registration, Refusal for Registrations
- Goodwill, Doctrine of Passing-off – actions and its development in India
- Domain Names Dispute and Cybersquatting
- Geographical Indications

UNIT – III: Law of Copyright and Industrial Design

- Fundamentals of Copyright, Subject Matter of Copyright, International Treaties and Conventions
- Economic Rights and Moral Rights
- Doctrine of Fair Dealing
- Neighbouring Rights
- Infringement of Copyright and Remedies
- Industrial Design: International Regime; Salient features of Design Act, 2000

UNIT – IV: Law of Patents including Law on Protection of Bio-Diversity, Farmers Rights and Traditional Knowledge

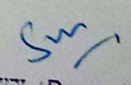
- Evolution of Patent Law in India, Salient Features of Patent Act, 1970
- Patentability criteria, Remedies for infringement, Term of protection
- Patent in International Regime: Conventions and Treatise (Relevant Provisions under

TRIPs Agreement, 1994)

- Protection of Traditional Knowledge, Issues of Bio-piracy – Infringements & Remedies
- Bio-Diversity Act, 2002 (Salient Features and other Relevant Sections)
- Salient Features of Protection of Plant Varieties & Farmer's Rights Act, 2000

Suggested Readings:

1. V.K. Ahuja, *Intellectual Property Rights in India* (Lexis Nexis, Butterworths, Wadhwa, Nagpur, 2015).
2. Alka Chawla, *Copyright and Related Rights: National and International Perspectives* (Macmillan India Ltd., Delhi, 2007).
3. Alka Chawla, *Law of Copyright: Comparative Perspectives India* (Lexis Nexis, Butterworths, New Delhi, 2013).
4. David Bainbridge, *Intellectual Property*, 9th Edition (Pearson Education, Delhi, 2012).
5. Elizabeth Verkey, *Law of Patent* (Eastern Book Company, Lucknow, 2005).
6. Holyoak & Torremans, *Intellectual Property Law* (Oxford University Press, NY, 2016).
7. Kailasam & Vedaraman, *Law of Trade Marks & Geographical Indications* (Wadhwa, Nagpur, 2009).
8. Latha R Nair and Rajendra Kumar, *Geographical Indications: A Search for Identity* (Lexis Nexis, New Delhi, 2005).
9. Lionel Bentley and Brad Sherman, *Intellectual Property Law* (Oxford University Press, New Delhi, 2003).
10. Rami M. Olwan, *Intellectual Property Rights and Development: Theory and Practice* (Springer, 2013).
11. Srividhya Ragavan, *Patent and Trade Disparities and Developing Countries* (Oxford University Press, 2012).
12. Tanya Aplin & Jennifer Davis, *Intellectual Property Rights Law* (Oxford University Press, New York, 2009).


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TITLE OF THE COURSE: PLAGIARISM AND ACADEMIC INTEGRITY

COURSE CODE: SCSI LIS 01 03 07 GEC 4004

Objectives of the Course:

1. To familiarize students with the concept of Plagiarism.
2. To understand the reasons and prevention of plagiarism.
3. To understand the concept of referencing and citations.
4. To familiar the students with antiplagiarism and bibliographical tools.

UNIT I: Plagiarism Overview

- Plagiarism: Concept, Definition, Meaning and Historical Perspective
- Possessive Individualism and Copyright.
- Element and Types of Plagiarism

UNIT II: Reasons and Preventions

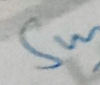
- Reasons of Plagiarism
- Plagiarism Prevention: Training, Transparency and Testing
- Policy for Academic Integrity

UNIT III: Citation and References

- Citation and References: Concept, Meaning and Definition
- Citation Styles and Manuals: APA, Chicago, MLA
- Reference Management Softwares: Microsoft Word, Mendeley, Zotero, Endnote

UNIT IV: Plagiarism Detection Tools and Penalties

- Similarity Index and Art of finding Plagiarism
- Plagiarism Detection Software: Trunitin , URKUND and iThenticate
- Penalties for Plagiarism: UGC Regulations 2018


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Recommended Readings

- Fishman, T. (2009). *"We know it when we see it" is not good enough: Toward a Standard Definition of Plagiarism that Transcends Theft, Fraud, and Copyright*. Proceedings of the Fourth Asia Pacific Conference on Educational Integrity (4APCEI). NSW, Australia: University of Wollongong.
- Howard, R. M. (1999). *Standing in the Shadow of Giants: Plagiarists, Authors, Collaborators*. Stanford: Ablex Pub.
- Neville, C. (2016). *The complete guide to referencing and avoiding plagiarism*. Open University Press.
- Pecorari, D. (2015). *Academic writing and plagiarism: A linguistic analysis*. London: Bloomsbury.
- Sutherland-Smith, W. (2008). *Plagiarism, the internet and student learning: Improving academic integrity*. New York: Routledge.
- UGC. (2018 August, 14). *UGC (Promotion of Academic Integrity and Prevention of Plagiarism in Higher Educational Institutions) Regulations, 2018*. Retrieved from https://ugc.ac.in/pdfnews/7771545_academic-integrity-Regulation2018.pdf
- Verma, P. K. (2005). *Being Indian*. New Delhi: Penguin India.
- Weber-Wulff, D., & Springer-Verlag GmbH. (2016). *False Feathers: A Perspective on Academic Plagiarism*. Berlin: Springer.

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Modern Optics

Scheme Version: 2019	Name of the subject: Modern Optics	L	T	P	C
	Applicable to Programs: UG & PG	3	1	0	4
Subject Code: SPMS PHY 01 102 GEC 3104	Prerequisite: B.Sc. with Physics	Total hours = 60			
	Semester I				

Course objective: The course Modern optics has focus on the Geometrical and wave optics, thin films, Holography, optical fibre, liquid crystals, LED and Photonic band gap crystals.

UNIT I

An overview of Geometrical and Wave Optics: Laws of Reflection, Refraction, Total Internal Reflection; Ideas of Interference, Diffraction, Polarisation, Dispersion.

UNIT II

Fresnel Relations: Conductors, Thin Films: Reflection Model, Matrix Formalism, Coating Design, Fourier Optics: Wave Propagation, Fraunhofer Diffraction, Fresnel Diffraction, Spatial Filtering, Holography and Holograms.

UNIT III

Coherence, Interference and Visibility, Laser Physics: Overview, Gain Saturation, Light-Atom Interactions, Optical Gain and Pumping Schemes, Output Characteristics, Light Shifts and Optical Forces, Atom-Photon interactions.

UNIT IV

Fiber Optics: Mode Analysis, Single mode and multimode optical fiber, Loss and Dispersion, Photonics Band-gap Crystals, Liquid crystals, Introduction of LED.

Learning outcome: After completion of this course, students would be able to

- hold the modern concepts like optical fibre, Holography, liquid crystals which have various applications.

References:

- Pedrotti, Introduction to Optics, Pearson, 3rd Ed, 2006.
- A. Ghatak, Optics, Tata McGraw-Hill, 6th Ed, 2017.
- G. R. Fowles, Introduction to Modern Optics, Dover Publication, 2nd Ed, 1989
- B. E. A. Saleh and M. C. Teich, Fundamentals of Photonics, Wiley, 2nd Ed, 2012.
- E. Hecht, Optics, Addison Wesley, 4th Ed, 2001.
- J. T. Verdeyen, Laser Electronics, Prentice-Hall, 3rd Ed, 1995.
- A. E. Siegman, Lasers, University Science Book, Revised Edition, 1986.


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TITLE OF THE COURSE: INFORMATION LITERACY

COURSE CODE: SCS LIS 01 01 01 GEC 4004

Objectives of the Course:

1. To understand the basic concept of Information Literacy
2. To study Information literacy standards and Programmes
3. To understand the concept of search engines
4. To familiar the students to access various online information sources

UNIT I: Introduction of Information Literacy

- Concept, need and importance of information literacy
- Types of information literacy
- Role of information in the knowledge society

UNIT II: Information Literacy Standard and Programmes

- ACRL information literacy standards
- National programmes in information literacy
- International programmes in information literacy

UNIT III: Search Engines

- Origin and development of search engines
- Introduction to general (Google, Bing & Yahoo) & Meta search engines (Ask Jeevs, Savvy Search & Dogpile)
- Information search through specialized search engines (Scirus)

UNIT IV: Online Information Resources

- OPACs & World Cat
- Open source e-journals
- Open source e-books and online databases

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विद्याधनं सवधनप्रधानम्

M.Sc. BIOCHEMISTRY
SIAL BC 1 3 04 GE 4004: MOLECULAR BIOLOGY
SEMESTER - III

TOTAL HOURS: 60

CREDITS: 4

Unit 1: Nucleic Acid

No. of Hours: 15

DNA as genetic material; Primary, secondary and three-dimensional structures of DNA; Super coiling; Forms of DNA; Polytene and lamp brush chromosomes; Properties of DNA in solution; Denaturation and renaturation; Reassociation reactions; COT curves; Types of RNAs and their primary and secondary structure; Role of RNA; Unusual bases in RNA.

Unit 2: Replication; Transcription

No. of HOURS: 15

Replication of DNA and synthesis of RNA; Central dogma of molecular biology; DNA and RNA polymerases and other enzymes involved in replication; mechanisms of replication; inhibitors of transcription; proof reading function and fidelity of DNA replication; possible modes of DNA replication; theta model and rolling circle model of DNA replication; replication of DNA in eukaryotes; role of methylation; replication of viral RNA; reverse transcriptase. Prokaryotic and eukaryotic gene structure; transposable elements in bacteria; mobile elements in eukaryotes; regulatory region and transcriptional unit of gene; post transcriptional processing of RNA: splicing, cap addition and polyadenylation polynucleotide phosphorylase; classification and molecular basis of mutation; Ames test and other testing systems; repair mechanism in prokaryotes and eukaryotes; site directed mutagenesis.

Unit 3: Gene expression and its regulation, Translation and its control, Translation and its control

No. of HOURS: 15

Gene expression in prokaryotes; enzyme induction and repression; negative and positive control; concept of operon; catabolite repression; transcriptional termination control via mRNA alternative conformations; regulation of gene expression in eukaryotes; promoters, enhancers and response elements; regulation at transcriptional level: Britten Davidson Model; control by steroid hormones. Translation; adapter role of RNA in protein synthesis; size of the code; methods of deciphering the genetic code; code word dictionary; general features of the genetic code; identification of anticodons; wobble hypothesis; ribosome as the site of protein synthesis; polysomes; activation of amino acids; initiation, elongation and termination of protein synthesis in prokaryotes and eukaryotes

Unit 4: Posttranslational modifications, Mutation and the DNA Damage and Repair System

No. of HOURS: 15

Control of translation: role of guanine nucleotides; post-translational processing of the polypeptide chains; acetylation, methylation, phosphorylation by protein kinases; sulfation; glycosylation; role of vitamins; role of chromatin structure in gene expression; cytoplasmic regulation of gene expression; organelle genome; epigenetics. Mutation. Various types of mutations. Spontaneous mutation and induced mutation. Reversion of mutations. Conditional mutation. Induced mutations. Radiation induced mutation. Effect of UV. Chemically induced mutation. Mutagenesis. Site directed mutagenesis. Oligonucleotide directed site mutagenesis. Mutagenicity of a chemical substance. Ames Test. DNA damage and repair. Types of DNA damage. Deamination. Depurination. Thymine dimer formation. Basic pathways for DNA repair. Direct repair. Excision repair. Mismatch repair. Error prone repair of DNA. Other mechanisms of DNA repair. DNA modification.

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SUGGESTED READINGS

1. D.L. Nelson, M.M. Cox. (2013). Lehninger Principles of Biochemistry (6th Edition), W.H. Freeman and Company, New York, USA.
2. J.M. Berg, J.L. Tymoczko, L. Stryer. (2012) Biochemistry (7th Edition), W.H. Freeman and Company; New York, USA.
3. Principles of Biochemistry (2008) 3rd ed., Voet, D.J., Voet, J.G. and Pratt, C.W., John Wiley & Sons, Inc. (New York), ISBN:13: 978-0470-23396-2
4. B. Lewin, J. Krebs, S.T. Kilpatrick, E.S. Goldstein (2011). Genes X, (10th Volume) Jones and Bartlett Publishers, Sudbury, Massachusetts, USA.
4. J.D. Watson, T.A. Baker, S.P. Bell, A. Gann, M. Levin, R. Losick. (2013). Molecular Biology of the Gene (7th edition). Benjamin Cummings, San Francisco, USA.
5. R.F. Weaver (2007). Molecular Biology. (4th edition). McGraw Hill. New York. USA.

Course – ENTREPRENEURSHIP DEVELOPMENT

Course Code - SLM COM 1 3 04 GE 3104

Credit: 4

Objectives: *This Course Aims at Instituting Entrepreneurial skills in the students by giving an overview of who the entrepreneurs are and what competences are needed to become an entrepreneur.*

Course Contents:

UNIT-1

Concept and Definitions; Role of entrepreneurship in Economic development; Entrepreneurship process; Factors impacting emergence of entrepreneurship; Women Entrepreneurs; Classification and Types of Entrepreneurs; EDP Programmes; Entrepreneurial Training; Traits/Qualities of an Entrepreneurs.

UNIT-2

Creating Entrepreneurial Venture: Generating Business idea- Sources of Innovation; methods of generating ideas; Creativity and Entrepreneurship; Business planning process; Legal issues – forming business entity, considerations and Criteria, Requirements for formation of a Private/Public Limited Company; Legal Acts Governing Business in India.

UNIT-3

Marketing plan– for the new venture; environmental analysis; steps in preparing marketing plan; marketing mix; contingency planning; Organizational plan – designing organization structure and Systems.

UNIT-4

Entrepreneurial Finance: Debt or equity financing; Sources of Finance- Commercial banks; private placements; venture capital; financial institutions supporting entrepreneurs; Lease Financing; Funding opportunities for Startups in India.

Suggested Readings:

1. Donald F. Kuratko, T.V. Rao, *Entrepreneurship: A South Asian Perspective*, Cengage Learning.
2. Robert Hisrich, Michael Peters, Dean Shepherd, *Entrepreneurship*, McGraw-Hill Education
3. Vasant Desai, *Dynamics of Entrepreneurial Development and Management*, Himalaya Publishing House.
4. Mare J. Dollinger, *Entrepreneurship: Strategies and Resources*, Illinois, Irwin.
5. David H. Holt, *Entrepreneurship: New Venture Creation*, Prentice-Hall of India, New Delhi.
6. K. Ramachandran, *Entrepreneurship Development*, McGraw-Hill Education

Note: Latest edition of the readings may be used.

Note: The list of cases, references and relevant articles will be provided by the faculty in the class.

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FUNDAMENTALS OF INVESTMENT

COURSE CODE- SLM COM 11 01 GE 3104

CREDIT: 4

Objective: To familiarize the students with the concept of investments, different investment alternatives, introduce them to the framework of their analysis and valuation.

Course Contents:

UNIT I

The Investment Environment: The investment decision process, Types of Investments – Commodities, Real Estate and Financial Assets, the Indian securities market, the market participants and trading of securities, security market indices, sources of financial information, Concept of return and risk, Impact of Taxes and Inflation on return.

UNIT II

Fixed Income Securities: Bond features, types of bonds, estimating bond yields, Bond Valuation types of bond risks, default risk and credit rating.

UNIT III

Approaches to Equity Analysis: Introductions to Fundamental Analysis, Technical Analysis and Efficient Market Hypothesis, dividend capitalisation models, and price-earnings multiple approach to equity valuation.

UNIT IV

Portfolio Analysis and Financial Derivatives: Portfolio and Diversification, Portfolio Risk and Return; Mutual Funds; Introduction to Financial Derivatives; Financial Derivatives Markets in India

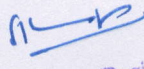
Suggested Readings

1. Charles P. Jones, *Investments Analysis and Management*, Wiley.
2. Prasanna Chandra, *Investment Analysis and Portfolio Management*, McGraw Hill Education
3. R.P. Rustogi, *Fundamentals of Investment*, Sultan Chand & Sons, New Delhi.
4. N.D. Vohra and B.R. Bagri, *Futures and Options*, McGraw Hill Education
5. Mayo, *An Introduction to Investment*, Cengage Learning.

Note: Latest edition of the readings may be used.

Note: The list of cases, references and relevant articles will be provided by the faculty in the class.


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PAPER: 5: HISTORY OF HARYANA

Number of credits:

4

Nature of course:

GE

Aim of the course:

The broader aim is to make pupil understand the different historical phases in the history of Haryana. How Haryana marched towards its journey to civilization will form a major aim of the paper.

Objectives of the course:

- i. To know the civilizational development in Haryana;
- ii. To focus on the regional history;
- iii. To provide a socio-cultural study of the area; and
- iv. To critically examine the various facets of historical development.

UNIT 1: Ancient Haryana:

- A. Sources of Ancient Period
- B. Harappan Civilization: General Features
- C. Growth of Vedic Civilization and Historicity of battle of Mahabharata.
- D. From Republic to Empire: Yaudheyas, Agras and Kunindas; Pushpabhutis

UNIT 2: Medieval Haryana:

1. Rise of New Powers:

- A. Sources of Medieval Period
- B. Gurjara-Pratiharas;
- C. Tomaras;
- D. Chahamanas.

2. Sultanate Period:

- A. Haryana on the Eve of Turkish Invasion;
- B. Revolts of Meos and Rajputs;
- C. Provincial Administration-Iqta system;
- D. Economic, Social and Cultural Changes.

UNIT 3: Mughal Period:

- A. First and Second Battle of Panipat and Hemu; Revolt of Satnamis
- B. Pargana Administration
- C. Economy-Land Revenue System: Cropping pattern and Irrigation System; Industries and Commerce.
- D. Socio-Religious Movement-Bhakti and Sufi: Spread and Impact

UNIT 4: Modern Haryana:

- A. Sources of Modern Period;
 - B. Political: Emergence of Marathas, Jats and Sikhs; George Thomas
- Socio-Religious Movements in Haryana: a. Arya Samaj, b. Sanatan Dharam
- C. Development of Education in Colonial Haryana;
 - D. Political Movements: i. Revolt of 1857; ii. Rise of Political Consciousness; iii. National Movement (1885-1919); iv. 1920- 1947: Mass Movements; Non Cooperation; Civil Disobedience; Praja Mandal, Quit India Movement; Regional Consciousness-Unionist Party.

Classroom strategy:

With the help of formal lectures and discussions the rather unfamiliar aspects of the age will be discussed. Guest lecture, too, may be arranged depending upon the requirement of the course module.

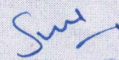
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Projects, assignments, discussions and tutorial classes will form part of the class room teaching of the course.

Suggested Readings:

- Buddha Prakash, Haryana through the Ages, Kurukshetra University, Kurukshetra, 1962.
- Glimpses of Haryana, Kurukshetra University, Kurukshetra, 1969.
- Das Gupta, K.K., Tribal History of Ancient India,
- Devahuti, D., Harsha: A Political Study, Oxford Clarendon Press, 1970.
- Dwivedi, H.N., Dilli ke Tomar (736-1193), Vidya Mandir Prakashan, Gwalior, 1973.
- Goyal, J.B., (ed.) Haryana-Puratattna, Itihas, Sanskriti, Sahitya evom Lokwarta, Delhi, 1966.
- Gupta, S.P. & Rama & Chandran, K.S., Mahabharata: Myth and Reality, Agam Prakashan, New Delhi, 1976.
- Phadke, H.A. Haryana: Ancient and Medieval, Harman Publication House, New Delhi, 1990.
- Phogat, S.R., Inscriptions of Haryana, Kurukshetra University Kurukshetra, 1978.
- Puri, B.N., History of Gurjar-Pratiharas, Munshiram Manoharlal, New Delhi, 1968.
- Sen, S.P. (Ed.), Sources of the History of India, Vol. II, Munshiram Manoharlal, New Delhi, 1979.
- Sharda, Sadhu Ram, Haryana-Ek Sanskritik Adyayan, Bhasha Vibhag, Haryana, Chandigarh, 1978.
- Sharma, D., Early History of Chahamanas, Delhi, 1959.
- Singh, Fauja (ed.), History of the Punjab, Vol. I-III, Publication Bureau, Punjab University, Patiala, 1997-2000.
- Suraj Bhan, Excavations at Mithathal (1968) and other Explorations in Satluj Yamuna Divide, Kurukshetra University, Kurukshetra, 1975.
- Tripathi, R.S., History of Kanauj, Munshiram Manoharlal, New Delhi, 1964.
- Yadav, K.C., Haryana: Itihas evom Sanskriti, Part 1 & 2, Manohar Publisher, New Delhi, 1994 (2nd Ed.)


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GENERIC ELECTIVE COURSE

LIFE SKILLS in EDUCATION COURSE CODE SAHS ED 01 03 01 GE 4004

Credits-4

No. of Lectures-48

Course Objectives: After studying the course, the students will be able to-

- To understand the concept of life skills and its evolution.
- To recognize and analyse the importance of life skills education by studying the reports of international organizations and committees.
- To understand the thinking skills and coping skills and subsequently will be able to design activities to develop thinking skills and coping skills.

Unit 1: INTRODUCTION and EVOLUTION OF THE CONCEPT OF LIFE SKILLS

- Definition and Importance of Life Skills
- Genesis of the Concept
- UN Inter-Agency Meeting
- Hamburg Declaration
- Quality Education and Life Skills: Dakar Framework
- Life Skills Education in the Indian Context

Unit 2: THINKING SKILLS

- ☐ Thinking
 - Nature, Elements of Thought
 - Types of Thinking
- ☐ Creative and Critical Thinking
- ☐ Problem Solving
 - Definition, Steps in Problem Solving
 - Factors Influencing Problem Solving
- ☐ Decision Making
 - Definition, Process, Need
 - Consequences, Models of Decision Making
 - Goal Setting

Unit 3: COPING SKILLS

- ☐ Coping with Emotions
 - Definition, Characteristics, Types of emotions
 - Causes and effects of different emotions
 - Strategies of coping with emotions
 - Strategies to develop skills of managing emotions: Classroom discussion; Brainstorming; Role-plays, Audio and visual activities e.g Arts, Music, Theatre, Dance; Case Studies, Storytelling, Debates
- ☐ Coping with Stress
 - Definition, Stressors
 - Sources of Stress
 - The General Adaptive Syndrome Model of Stress
 - Coping Strategies

Unit 4:

SOCIAL SKILLS AND NEGOTIATION SKILLS

- Introduction Life Skills: Generic, Problem Specific and Area Specific Skills
- Self-Awareness - Definition, Types of Self - Self Concept, Body Image, Self Esteem - Techniques used for Self Awareness: Johari Window, SWOT Analysis
- Empathy - Sympathy, Empathy & Altruism
- Effective Communication - Definition, Functions, Models, Barriers
- Interpersonal Relationship - Definition, Factors affecting Relationships

PROJECT WORK

Under Life Skills Project the students are expected to design activities to develop the following ten life skills.

1. Self-Awareness
2. Empathy
3. Problem Solving
4. Decision Making
5. Effective Communication
6. Interpersonal Relationships / Friendships
7. Creative Thinking
8. Critical Thinking
9. Coping with Emotions
10. Coping with Stress.

The Thinking skills and coping skills will be demonstrated through Role-plays, Arts, Music, Theatre, Dance, Storytelling, Debates etc. on diverse issues in the form of workshops.

Transaction Mode

Lecture Method, Activity based Method, Survey Method, Cooperative Learning

Prescribed Books:

1. Dahama O.P., Bhatnagar O.P., (2005). Education and Communication for Development, (2nd Edn.), Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi.
2. Debra McGregor, (2007). Developing Thinking; Developing Learning - A guide to thinking skills in education, Open University Press, New York, USA
3. Duffy Grover Karen, Atwater Eastwood, (2008). (8th Edn.), Psychology for Living Adjustment, Growth and Behaviour Today, Pearson Education Inc, New Delhi.
4. Hockenbury (2010). Discovering Psychology, Worth Publishers. New York
5. Jane S Halonen, John W. Santrock, (2009), Psychology: Context & Application, McGraw-Hill Companies Inc., Third Edition, USA
6. Nair .V. Rajasenan, (2010). Life Skills, Personality and Leadership, Rajiv Gandhi National Institute of Youth Development, Tamil Nadu.
7. Nair. A. Radhakrishnan et al., (2010). Life Skills Assessment Scale, Rajiv Gandhi National Institute of Youth Development, Tamil Nadu.
8. Stella Cottrell, (2005). Critical Thinking Skills: Developing Effective Analysis and Argument, Palgrave Macmillan Ltd., New York

Suggested Readings:

- Delors, Jacques (1997). Learning: The Treasure Within, UNESCO, Paris.
- Nair .V. Rajasenan, (2010). Life Skills, Personality and Leadership, Rajiv Gandhi National Institute of Youth Development, Tamil Nadu. Page 8 of 62
- UNESCO (1997). Adult Education: The Hamburg Declaration, UNESCO, Paris.
- UNESCO (2005). Quality Education and Life Skills: Dakar Goals, UNESCO, Paris.
- WHO (1999). Partners in Life Skills Education: Conclusions from a United Nations Inter-Agency Meeting, WHO, Geneva.
- Nair. A. Radhakrishnan, (2010). Life Skills Training for Positive Behaviour, Rajiv Gandhi National Institute of Youth Development, Tamil Nadu.
- Santrock W. John (2006). Educational Psychology. (2nd Edn.) New Delhi: Tata McGraw-Hill Publishing Company Ltd.
- Dakar Framework for Action, (2000). Education for All: Meeting our Collective Commitments, Dakar, Senegal.
- Life Skills Resource Manual, Schools Total Health Program, (2006). Health Education and Promotion International Inc., Chennai.
- Kumar .J. Keval, (2008). Mass Communication in India, JAICO Publication India Pvt. Ltd
- Morgan and King, (1993). Introduction to Psychology, Tata McGraw-Hill Publishing Company Ltd, New Delhi.
- Rao P.L. (2008). Enriching Human Capital through Training and Development, Excel Books, Delhi.
- Singh Madhu, (2003). Understanding Life Skills, Background paper prepared for Education for All: The Leap to Equality
- UNESCO and Indian National Commission for Co-operation with UNESCO (2001). Life Skills in Non-formal Education: A Review

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MATHEMATICS FOR CHEMISTS

(SPMMAT 01 01 04 GEC 3104)

UNIT-I

Algebraic, Transcendental functions, approximation, errors in approximation: Absolute, Relative and percentage errors. Matrices and their properties, some special matrices, matrix algebra, the inverse matrix, linear transformations, orthogonal matrices and orthogonal transformations.

UNIT-II

Solution of differential equations: First-order linear equations- Separable equations, homogeneous linear equations, Non homogeneous linear equations, Second-order differential equations with Constant coefficients: general solution, particular solution, linear equations in chemical kinetics, harmonic oscillator and some other applications.

UNIT-III

Singular points, Power series solution of differential equation at regular and irregular singular points, Bessel's and Legendre's equations and their solutions, Partial differentiation, Types of partial differential equations.

Line integrals, double integrals, change of variables, polar coordinates, volume integrals, Laplacian operator, finite difference operators.

UNIT-IV

Descriptive statistics: Measures of central tendency, measures of dispersion, Frequency and probability, Combinations of probabilities, Permutations and combinations, Binomial distribution, Gaussian distribution.

Suggested Readings:

1. Steiner, E. *The Chemistry Maths Book*. 2nd edition, Oxford University Press, 2008.
2. Raisinghania, M. D. *Advanced Differential Equations*. S. Chand & Company Ltd. New Delhi, 2001.
3. Gupta, S. C. and Kapoor, V. K. *Fundamentals of Mathematical Statistics*. S. Chand & Sons, 2014.
4. Lipschutz, S. and Lipson, M. *Linear Algebra*. 3rd edition, Tata McGraw-Hill, 2005.

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Syllabus Booklet

Course Code: SAHS ECO 01 305 GE 3104

Objective: *The objective of this course is to make students understand with the current and critical issues, challenges and problems of the Indian economy.*

Unit-I

Changing structure of Indian economy, Imbalance in occupational pattern and contribution to GDP, Determinants of acceleration in growth rate of GDP in India, Behavior of saving and investment in recent years. Infrastructure bottlenecks in Indian economy, impact of institutional factors on development of Indian economy.

Unit-II

Stagnancy in productivity in agriculture sector and trends in its diversification; Issues of competitiveness of Indian manufacturing sector, emergence of knowledge intensive industries in India.

Unit-III

Centre-State finance relations; Recent Finance Commission, NITI Ayog; other sources of transfer; Tax revenue of the central and state governments; evaluation of Indian tax structure; Goods and services tax in India.

Unit-IV

Recent foreign trade policy in India; Composition and Direction of India's foreign trade, Indian government's policy towards foreign capital; foreign investment inflows, foreign aid and India's external debt.

Recommended Readings:

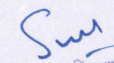
1. Kapila, U. (2015), '*Indian Economy since Independence*', Academic Foundation.
2. Kapila, U. (2015), '*Indian Economy: Performance and Policies*', 16th edition, Academic Foundation.
3. Dutt and Sundharam, '*Indian Economy*', 65th edition, S.Chand.
4. Rangarajan, C., (2004), '*Select Essays on Indian Economy*', Vol.1&2, Academic Foundation.
5. Krueger A. (2003), '*Economic Policy Reforms and the Indian Economy*', Oxford University Press.
6. Mishra & Puri, (2015), '*Indian Economy*', Himalaya Publishing House.
7. Timothy Besley (2016), '*Contemporary Issues in Development Economics*', Palgrave Macmillan.
8. Government of India, Ministry of Finance, "Economic Survey (latest Issue).
9. Government of India, Ministry of Finance, "Finance Commission Report (latest Issue).
10. Nayak, Golder and Aggarwal, (2011), '*India's Economy and Growth Essays in Honour of V K R V Rao*' Sage India.

Generic Elective Courses (GEC)

Year	I	VALUE BASED EDUCATION (GEC)	Credits	4
Semester	I		Course Code	SOE 02 01 01 GEC 3104
Learning Outcomes	After the completion of the course, students will be able to:			
	- Describe the concept, need and classifications of values and adopt various values. - Summarize the importance of value education and critically analyze the need for value education. - Adopt various aspects of values for personal development. - Inculcate and develop various social values.			
Course Content				
Unit -1	Understanding of Values			
	- Concept, need and importance of values, classification of Values - Core values- truth, righteous conduct, peace, love and non-violence - Challenges of Values Adoption - Strategies for inculcating values			
Unit -2	Value Education			
	- Concept, need and importance of Value Education - Values inherent in the preamble of Indian Constitution - Roll of family, school and society in promoting Values - Recommendations of Shri Prakash committee on value Education			
Unit -3	Values for Personal Development			
	- Impact of Religion & Secularism - Values for Character Development - Integration of values in education - Methods and approaches of inculcating values			
Unit -4	Values in Society			
	- Positive Thinking -Concept, tips to develop positive attitude - Emotional Maturity- Concept and levels			

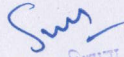
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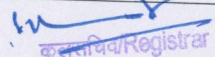
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	• Women's Empowerment – Concept and importance • Environmental Awareness – Concept and importance
Transaction Strategies/ Teaching Learning Process	Lecture cum discussion, Tutorials, Brainstorming Session, Use of PPTs, Assignments on different key areas of Value related issues.
Practicum: • Develop / compile stories with values from different sources and cultures, organize value based co-curricular activities in the classroom and outside the classroom. • Develop value-based lesson plans, integrating values in school subjects. • Study of any Model of integrated value education – case study of models expressed by Sri SatyaSai, J. Krishnamurti, etc. • In addition, school and community-based activities may be organized.	
Suggested Readings: • Anchukandam, T. and J. Kuttalnimathathll (1995). <i>Grow free, live free</i>. Bangalore: Kristu Jyoti Publications. • Arulsamy, S. (2016). <i>Peace and value education</i>. New Delhi: Neel Kamal Publication. • Barash, P. David (2000). <i>Approaches to Peace</i>. New York:Oxford University Press. • Behra, S.K., Duarah, Mouchumi and Mohakud, Lalit Lalitav (2018). <i>Value Education in the 21st Century</i>. New Delhi: New Delhi Publishers. • Charles, K. (2016). <i>Value education</i>. New Delhi: Neel Kamal Publication. • Charles, K., &Selvi, A. (2016). <i>Peace and value education</i>, New Delhi: Neel Kamal Publication. • Govt of India (1983). <i>Report on education in human values in teacher training programmes</i>, New Delhi, and Ministry of Human Resource Development. • Jacob, M. (2002). <i>Resource book for value education</i>. New Delhi: Institute for Value Education • Kapani, Madhu (2000). <i>Education in human values – concept and practical implications</i>, New Delhi: Sterling Publishers. • S. Ignacimuthu(1991). <i>Values for life – Better Yourself Books</i>, Mumbai. • Sri Sathya Sai Bal Vikas Education Trust (1985). <i>Curriculum and methodology for integrating human values education</i>, PrashanthiNilayam (International Education). • Sri SathyaSai International Center for Human Values (2009). <i>Education in human values</i>. Course Book for Training of Master Trainers, New Delhi. • <i>The curriculum framework for quality teacher education</i> (1998) NCTE, New Delhi.	


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Scheme and Syllabus of B.Ed. Programme w.e.f. Academic Session 2021-22

सामान्य वैकल्पिक पाठ्यक्रम (GEC)

प्रथम सेमेस्टर में प्रस्तावित

पाठ्यक्रम: हिंदी की संस्कृति

पाठ्यक्रम कोड : SLLCH HND 1 1 01 GE 4004

इकाई	पाठ्यक्रम
1.	साहित्य की परिभाषा एवं स्वरूप साहित्य की प्रकृति एवं उद्देश्य साहित्य एवं समाज का अंतर्संबंध
2.	हिंदी साहित्य का स्वरूप एवं विस्तार भक्ति आन्दोलन एवं प्रतिरोध की संस्कृति हिंदी साहित्य में व्यक्तिवाद एवं रीति संस्कृति
3.	आधुनिकता का उदय एवं साहित्य आधुनिक हिंदी साहित्य एवं राजनीति
4.	हिंदी साहित्यिक संसार के प्रमुख स्वर साहित्यिक पत्रकारिता का वर्तमान स्वरूप हिंदी की वर्तमान दशा एवं दिशा

संदर्भ पुस्तकें :

- परम्परा का मुल्यांकन : रामविलास शर्मा, राजकमल प्रकाशन, नई दिल्ली
- हिंदी रीति साहित्य : भागीरथी मिश्र, राजकमल प्रकाशन, नई दिल्ली
- हिंदी साहित्य का अतीत : विश्वनाथ प्रसाद तिवारी, वाणी प्रकाशन, नई दिल्ली
- साहित्य का समाजशास्त्र : मैनेजर पांडेय, हरियाणा साहित्य अकादमी, पंचकुला, हरियाणा
- साहित्य और इतिहास दृष्टि: मैनेजर पांडेय, वाणी प्रकाशन, नई दिल्ली
- आधुनिक साहित्य की प्रवृत्तियाँ : नामवर सिंह, लोकभारती प्रकाशन, इलाहाबाद
- भारतीय काव्यशास्त्र : कृष्ण देव झारी, शारदा प्रकाशन, नई दिल्ली
- पाश्चात्य काव्यशास्त्र : देवेन्द्रनाथ शर्मा, मयूर पेपर बेक्स, नई दिल्ली

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Mahendergarh, Haryana - 123029

SEMESTER – I

Course title: Work Physiology, Physical Fitness and Health
Course code: SIAL NB 1 1 02 GE 4004

Credit: 4
Lectures: 60

Course objective: To provide an understanding of effect of physical activity on body composition, fitness and health.

Learning outcomes:

- Understanding the concepts & components of health and physical fitness
- Comprehensive knowledge of energy metabolism during exercise or physical activity
- Understanding the importance of maintaining thermoregulation, fluid & electrolyte balance

Unit-I

Definition of health, components of health, holistic health, positive health concept, Physical fitness- definition, components, methods of assessing, role in maintenance of healthy & wellness and types of exercises for fitness training, guidelines for physical activity to maintain health, prevention of obesity and its co-morbidities, techniques to assess physical fitness, Aging theories, physiology, mechanism and role of nutrients in arresting aging process

Unit-II

Body composition, Methods of measuring body composition: direct and indirect. Body composition in different physiological conditions, factors affecting body composition, muscle - structure, muscle classification and types of muscle contraction, major muscles of neck, shoulder, arms, chest, abdominal, back, hip and lower limbs, principles of muscle mechanics, Introduction of weight training, significance and principles of weight training, Do's and Don'ts of weight training

Unit-III

Energy metabolism and physical fitness: concept, importance, influencing factors, Techniques to measure energy expenditure and energy intake, types of energy systems, energy continuum and energy release, cardiovascular response to training and measurement of anaerobic & aerobic capacity, concept of isotonic/isometric/isokinetic exercises, various isotonic, isometric and isokinetic exercises for various muscles of the body, weight training exercises for the women, elderly people and for competitive sports person.

Unit-IV

Exercise and thermo regulatory mechanism, fluid and electrolyte balance, improving physical performance, Ergogenic aids: definition, market, types and effects, exercise and the neuroendocrine system, body composition and fat estimation calculation of kilocalories, harmful effects of quick weight reduction, Scientific approaches of weight reduction.

Suggested readings:

1. Alvero JC, Ronconi M, García JR, Carrillo MD, Jiménez ML, Correias LG, Álvarez EC. (2017) Body composition changes after sport detraining period. *Nutricion hospitalaria*. 34(3):632-8.doi: 10.20960/nh.618.
2. Mazzocchi G. Body composition: Where and when. *European journal of radiology*. 2016 Aug 1;85(8):1456-60.doi: 10.1016/j.ejrad.2015.10.020. Epub 2015 Oct 31
3. Essentials of Exercise Physiology (2015) 5th edition, William D. McArdle BS,

OFFERED TO OTHER DEPARTMENTS – SEMESTER I

BUSINESS COMMUNICATION

Course Code- SLM MGT 01 101 GEC 3104

Credit: 4

Objective:

The aim of the course is to develop skills and competencies in participants to be able to communicate effectively through the written and oral medium. Sensitivity towards cross cultural communication will be developed with familiarity with global business etiquette and protocols. The pedagogical focus of the course will be workshop based with emphasis on practice and skills development.

Contents:

UNIT I

Introduction and classification of communication: purpose of communication; process of communication; importance of communication in management; communication structure in organization; barriers & gateway in communication; 7 C's of communication; Impact of cross cultural communication.

UNIT II

Employment Communication : Writing CVs & Application Letter; Group discussions; interview; types of interview; candidates preparation; Interviewers preparation; Impact of Technological Advancement on Business Communication; Communication networks, Intranet, Internet, teleconferencing, videoconferencing.

UNIT III

Written communication and Oral communication: purpose of writing, pros & cons of written communication; principles of effective writing; writing technique; business letters and reports, reports: definition & purpose; types of business reports; reports writings ;oral communication; principles of successful oral communication; two sides of effective oral communication; effective listening; non-verbal communication; body language.

UNIT IV

Group communication and Meetings: need, importance & planning of Meetings; drafting of notice; agenda, minutes & resolutions of Meeting; writing memorandum; press

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15 | CLICK FOR MAIN REGISTRATION TABLE

Central University of Haryana

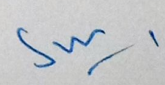
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release;press conference;;Business etiquettes; etiquettes; telephonic & table etiquettes;
PRESENTATION SKILLS :Welements of presentation; designing a presentation,
advanced visual support for business presentation;types of visual aid, appearance &
posture, practicing delivery of presentation.

Suggested Reading:

1. Bovee, Courtland L, Thill, John V. and Abha Chatterjee (2011). *Business Communication Today*. (10th ed.). New Delhi: Pearson
2. Chaturvedi, P. D. and Chaturvedi, Mukesh (2011). *Business Communication, Concepts: Cases and Applications*. (2nd ed.). New Delhi: Pearson
3. Gupta Mukherjee, Jaba (2011). *Management Communication – A Case Analysis Approach*. (4th ed.) Noida: Pearson.
4. Lesiker, Raymond V., Flatley Marie E., Rentz, Paula and Neerja Pande (2015). *Business Communication: Connecting in a Digital World*. (13th ed.). New Delhi: McGraw Hill Education
5. O'Rourke, James S. IV and Gupta, Jaba Mukherjee (2011). *Business Communication: A Case – Analysis Approach*. (4th ed.). New Delhi: Pearson

Note: The list of cases, references and relevant articles will be provided by the faculty in the class.


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Course Code- SLLCH THM 01 03 01 GEC 4004

Objective:-

This course deals with the theory of housekeeping operations in hotel business. Students shall learn and develop guest service skills in classes. Learners shall also be given an insight to housekeeping practices, the use and care of equipment, and tools along with their roles in various areas of professional housekeeping.

Content

UNIT-1

Introduction to Housekeeping Department

- 1.1 Introduction & functions of housekeeping department.
- 1.2 Organizational structure of housekeeping department.
- 1.3 Role & scope of housekeeping.
- 1.4 Emerging trends in housekeeping.

UNIT-2

Laundry

- 2.1 Introduction, types of laundry.
- 2.2 Process of laundry.
- 2.3 Laundry equipments & uses.
- 2.4 Introduction to stain removals & removal common stains.

UNIT-3

Cleaning in Housekeeping

- 3.1 Different types of Surfaces.
- 3.2 Cleaning and maintenance of various surfaces.
- 3.3 Cleaning agents used in housekeeping department.
- 3.4 Cleaning equipments.

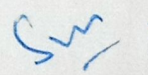
UNIT-4

Decoration & Designing

- 4.1 Concept of interior decoration in housekeeping department.
- 4.2 Concept and types of flower arrangement.
- 4.3 Concept and types of towel art.
- 4.4 Horticulture and its role in hotels.

Suggested Reading:-

- Joan C Branson & Margaret Lennox Hotel Hostel and Hospital Housekeeping, (ELBS), 2006
- Sudhir Andrews, Hotel House Keeping –Tata Mc Graw Hill, 2008
- Raghubalan, Hotel Housekeeping Operations & Management, Oxford University Press, 2008
- Jones-Housekeeping and Front Office ,Edward Publication, 1986


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Generic Elective Course (GEC)

Generic Elective Course (GEC)				
Year	II	EDUCATIONAL MANAGEMENT AND LEADERSHIP	Course Credits	4
Semester	IV		Course code	SOE 02 04 06 GEC 3104
Learning Outcomes	After the completion of the course the pupil-teachers will be able to: • Explain the concept and various functions of Educational Management. • Use effective methods of communication in their life. • Analyse traits, skills and styles of leadership. • Compare roles and importance of educational administration in India at local, state and central level.			
Course Content				
Unit -1	Educational Management: Conceptual Understanding • Meaning, Concept and importance of Educational Management • Objectives & Scope of Educational Management • Educational Manager: Characteristics, Functions and Roles • Managerial Ethics and creativity			
	Unit -2	School Management and Communication • Role and functions of Headmaster, Principal and Teacher • Process, Human Relations Approach to Management • Communication: Types, methods and devices • Barriers of Communication		
Unit -3		Educational Leadership: traits and skills • Leadership: Concept, functions and roles • Theories of leadership and management in educational organization • Leadership Traits and Skills • Functions and Styles of Leadership		
	Unit -4	Educational Administrative Bodies in India at National Level: Roles & Functions • Ministry of Human Resource Development (MHRD)		

	• University Grant Commission (UGC) • National Institute of Educational Planning and Administration (NIEPA) • National Council of Educational Research and Training (NCERT) and National Council for Teacher Education (NCTE)
Transaction Strategies/ Teaching Learning Process	Lecture cum discussion, Tutorials, Brainstorming Session, Recorded/ live Video and Audio lectures, Use of PPT, Film Shows (selected films), assignments on different key areas given in syllabus through Google Group, Google Classroom etc.
Practicum:	• Compile articles from newspapers, magazines, and internet discussing present policies and operational strategies of central and state Govt. for secondary education. Prepare a report of the entire activity. • Review research on educational management or management of secondary schools which are used in other countries but not in India. • Examine the effectiveness of any one programme run by central Govt. for secondary students. Present the report in a classroom seminar. • Any other activity/assignment suggested by the teacher.
Suggested Readings:	• Altrichter, H. and Elliot, J. (2000). <i>Images of Educational Change</i>. England: Buckingham Open University. • Bhattacharya, D.K. (2001). <i>Managing People</i>. New Delhi: Excel Books. • Bush T., L. B. (2003). <i>The Principles and practice of educational management</i>, (Edited, Ed.). New Delhi: Sage Publications. • Bush, T. (2013). <i>Educational management, administration & leadership</i>. New Delhi: Sage Publications. • Chauhan, S. (2012). <i>Educational management</i>. New Delhi: Pearson Publication. • Dawra, S. (2003). <i>Management thought</i>. New Delhi: Mohit Publication. • Harigopal, K. (2001). <i>Management of organizational change</i>. New Delhi: Response Books. • Luthans, F. (2005). <i>Organizational Behavior</i>. New York: McGraw – Hills Inc. • Lunenburg, F.C. & Orenstein, A.C. (2012). <i>Educational administration-Concept & practices</i>. USA: Wadsworth, Cengage Learning Solutions, Canada. • McCaffery, P. (2004). <i>The higher education manager's handbook</i>. New York and Canada: Routledge. • Nair, S.R. (2004). <i>Organizational behavior- Texts and cases</i>. Mumbai: Himalaya Publication. • Nangia, S.B. (2009). <i>Educational administration</i>. New Delhi: APH Publishing Corporation Publishing House. • Northouse, P. (2018). <i>Leadership theory and practice</i>. New Delhi: Sage Publications.

SEMESTER III Paper Title: EVENT MANAGEMENT

SJM JMC 13 04 GE 2114

Unit-1

Concept of event; Types of Events
Need for Professional Event Management
Scope of Event Management
Event Industry in India

Unit-2

Event management: Planning and steps
Preparing event proposal, pitching for the event
Permissions and licences for various events
Event Operations; Event technology and Logistics

Unit-3

Marketing mix, preparing event proposal, pitching for the event
Sponsorships, Branding through events
Media relations, Briefing journalists

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Unit-4

Various risks and risk assessment in events
Crowd management
Preparing Contingency Plan
Communication in Event Crisis

Reading List

Goldblatt, J. & Supovitz, F.; Dollars & Cents. *How to Succeed in the Special Events Business*. (John Wiley & Sons: New York, 1999).

Goldblatt, J. & Nelson, K.; *The International Dictionary of Event Management*. (Second Edition. John Wiley & Sons, Inc.: New York, 2001).

Hoyle, L. *Event Marketing*, (John Wiley & Sons, Inc.: New York, 2002).

Malouf, L. *Behind the Scenes at Special Events*. (John Wiley & Sons: New York, 1999).

Amsborg, G. and et al.; *Professional Convention Management Association. Professional Meeting Management – Comprehensive Strategies for Meetings, Conventions and Events*. (5th Edition. Dubuque Iowa, 2008).

Rutherford-Silvers, J. (2012). *Professional Event Coordination*. John Wiley & Sons Inc.: New York, NY

PRACTICAL

1. Making event plan of a musical concert
2. Crisis Plan of an event
3. Making Promotional plan of events

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SEMESTER III Paper Title: FILM APPRECIATION

SJM JM C 13 03 GE 2114

UNIT-I

Film as medium of expression; Film Genres

Approaching Films: Semiotics, Psychoanalysis, Linguistics,

Film forms: narrative and non-narrative

UNIT-II

Film Aesthetics

Regional and National Cinema in India, Bollywood, World cinema,

Film Movements; The rise of Multiplex cinema

UNIT-III

Basic Camera shots and Movements

Film editing Principles: Mise-en-scene and montage

Diegetic and Non-diegetic elements in a film

UNIT-IV

Major film festivals and awards: Indian and Global

Writing Film reviews

Film Certification categories

Reading list

1. Eric Baranenn&Krishnaswamy; *Indian Film* (OVP, 2nd Edition, 1980).
2. KhwajaAhemad Abbas, *How films are made* (National Book Trust, 1977).
3. MaricSetton; *Film as an art and appreciation*, (NCERT, New Delhi).

4. *Cinematography Censorship rules*, (Govt. of India Press, Nasik, 1969).

Practicals

Writing Film Appreciation for 5 feature films of Bollywood and cinema from other parts of the world.



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Course- Food and Dine

Credits-4

Course Code- SLLCH THM 01 02 01 GEC 4004

Objective:-

The aim of the course is to familiarize students with various types of Food & Beverages services provided by hospitality industry.

Content

UNIT-1

Introduction to catering services

- 1.1 Introduction to catering establishment.
- 1.2 Classification, types of catering establishment.
- 1.3 Hygiene and grooming standards of F&B staff.
- 1.4 Restaurant service equipments.

UNIT-2

Meal and Menu Planning

- 2.1 Introduction to menu and planning, different types of menu
- 2.2 Sequence of French classical menu.
- 2.3 Types of meal.
- 2.4 Types of food service.

UNIT-3

Introduction to Beverages

- 3.1 Introduction and classification of beverages.
- 3.2 Brief Introduction of Alcoholic Beverages.
- 3.3 Brief Introduction and Non Alcoholic beverages.
- 3.4 Services of Alcoholic Beverages.

UNIT-4

Preparation for service

- 4.1 Organizing mise-en-scene and mise-en-place.

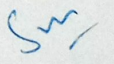
4.2 Cover set up, napkin foldings.

4.3 Tray and trolley set up.

4.4 Procedure for service.

Suggested Readings:-

- John, The Restaurant (From Concept to Operation), Wiley, 2013
- Graham Brown, The Waiter Handbook. Global Books & Subscription Services New Delhi, 1980
- Costas Katsigris, Chris Thomas, The Bar and Beverage Book, 5th Edition, Wiley Publications, 2012
- James Murphy, Principles and Practices of Bar and Beverage Management, Good fellow Publishers - Manage First, 2002
- Brian Varghese, Food & Beverage Service Management, 2002
- Sudhir Andrews, Food & Beverage Service Training Manual. Tata Mc Graw Hill, 2003
- Lillicrap & Cousins, Food & Beverage Service, ELBS, 2010
- Brown, Heppner & Deega, Introduction F& B Service, 2002


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SEMESTER-III

Course title: Advance Molecular Biology

Course code: SIAL BC 1 3 03 GEC 4004

Credit: 4

Lectures: 60

Course objective: To acquaint students with chromatin structure and gene expression, post-transcriptional events and translation.

Learning outcomes:

- Understanding the basic concepts of transcription and translation in prokaryotes and eukaryotes
- Understanding the mechanism of gene expression in prokaryotes and eukaryotes

Unit-I

DNA as genetic material; primary, secondary and three-dimensional structures of DNA; super coiling; forms of DNA; polytene and lamp brush chromosomes; properties of DNA in solution; denaturation and renaturation; reassociation reactions; COT curves; types of RNAs and their primary and secondary structure; role of RNA; unusual bases in RNA.

Unit-II

Replication of DNA and synthesis of RNA; central dogma of molecular biology; DNA and RNA polymerases and other enzymes involved in replication; mechanisms of replication; inhibitors of transcription; proof reading function and fidelity of DNA replication; possible modes of DNA replication; theta model and rolling circle model of DNA replication; replication of DNA in eukaryotes; role of methylation; replication of viral RNA; reverse transcriptase. Prokaryotic and eukaryotic gene structure; transposable elements in bacteria; mobile elements in eukaryotes; regulatory region and transcriptional unit of gene; post transcriptional processing of RNA; splicing, cap addition and polyadenylation polynucleotide phosphorylase; classification and molecular basis of mutation; Ames test and other testing systems; repair mechanism in prokaryotes and eukaryotes; site directed mutagenesis.

Unit-III

Translation; adapter role of RNA in protein synthesis; size of the code; methods of deciphering the genetic code; code word dictionary; general features of the genetic code; identification of anticodons; wobble hypothesis; ribosome as the site of protein synthesis; polysomes; activation of amino acids; initiation, elongation and termination of protein synthesis in prokaryotes and eukaryotes. Control of translation: role of guanine nucleotides; post-translational processing of the polypeptide chains; acetylation, methylation, phosphorylation by protein kinases; sulfation; glycosylation.

Unit-IV

Gene expression in prokaryotes; enzyme induction and repression; negative and positive control; concept of operon; catabolite repression; transcriptional termination control via mRNA alternative conformations; regulation of gene expression in eukaryotes; promoters, enhancers and response elements; regulation at transcriptional level: Britten Davidson Model; control by steroid hormones. Role of chromatin structure in gene expression; cytoplasmic regulation of gene expression; organelle genome; epigenetics.

Suggested readings:

1. Lewin's Genes XII (2017) 12th ed., Krebs, JE, Goldstein, ES and Kilpatrick, ST, Jones and Bartlett Publishers, ISBN 13: 978-1284104493.

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Pandey, J. (Ed.). (2004). *Psychology in India Revisited-Developments in the Discipline, Volume 3: Applied Social and Organizational Psychology* (Vol. 3). Sage.

Steg, L., Berg, A. E. V. D., & DeGroot, J. I. M. (2013). *Environmental Psychology*. Wiley, UK.

GENERIC ELECTIVE COURSE-II

PSYCHOLOGY IN EVERYDAY LIFE

SHSS PSY 01 02 02 GEC 4004

Credits: 4 (Hrs. /week: 4)

Total: 100 Marks

Internal Assessment: 30 Marks

Examination: 70 Marks

Objectives

By the end of this course, students will be able to gain the knowledge and to get them acquainted with the applications of basic concepts in different fields of psychology. To enable students, identify different methods to study psychology, to explore one's self, personality, and Intelligence. Further to make students understand how attitude is formed and how it can be altered in a time of need. To gain the science of influencing. Enabling students to know about the science of abnormal behaviour, its definition and Disorders as per the diagnostic manual.

Learning Outcomes

After completing the course, students will be able to:

- Understand & apply psychology in daily life.
- Describe various components of human behaviour.
- Apply the knowledge of self, attitude change and social influence to manage one's own and other's behaviour.
- Identify the Abnormal behaviour, stress and related health problems.

UNIT-I

Psychology: Nature, Scope and Applications

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Methods of Study: Experimental, Interview, Cross-Cultural, Observation; and Case Study

UNIT-II

Know Thyself: I & Me, Real-Self, Self-Concept, Self-Esteem; and Self-Efficacy.

Personality: Nature, Development and Assessment.

Intelligence: Nature, Theories and Measurement.

UNIT-III

Social Group: Nature, Types and Norms.

Attitude: Formation, Functions and Change of Attitude

Social Influence: Conformity, Compliance and Obedience; Helping Behaviour- Altruism and Prosocial Behaviour

UNIT-IV

Abnormality: Meaning, Nature, Criteria. Mental Disorders: Symptoms and Causes of Anxiety, Mood, Psychosomatic, and Eating Disorders.

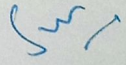
Suggested Readings

Baron, R.A. & Byrne, D. (2004). *Social Psychology*. Singapore: Pearson Education

Carson, R.C., Butcher, J. N., Mineka, S., & Hooley, J. M. (2007). *Abnormal Psychology* (13).
Ed. Pearson Education. New Delhi, India.

Heatherton, T., Halpern, D., & Heine S. (2012). *Psychological Science*. WW Norton & Company. Inc. New York.

Larsen, R.J. & Buss, D.M. (2011). *Personality Psychology: Domains of Knowledge about Human Nature*. New Delhi: Tata McGraw-Hill.


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SEMESTER-III

GENERIC ELECTIVE COURSE
SOCIAL AND COMMUNITY PSYCHOLOGY
SHSS PSY 01 03 03 GEC 4004

Credits: 4 (Hrs/week: 4)

Total: 100 marks
Internal Assessment: 30 marks
Examination: 70 marks

Objective

This course attempts to understand people in their social contexts. It integrates social phenomena and psychological research in culturally diverse contexts. The purpose of this course is to introduce the student to the breadth of topics, social issues, and research approaches that characterize community psychology

Learning Outcomes

After completing the course contents, students would be able to:

- *Compare and contrast the concepts, empirical findings, methods and techniques used in social psychology*
- *Explain major concepts and perspectives in social psychology*
- *Implement the understanding in social psychology to explain human behavior*
- *Integrate different perspectives to explain human behavior in community life*

UNIT-I

Introduction- Nature and Scope of Social Psychology;

Social Psychology of Everyday (Social Perception)

Methods- Survey, Ethnography, Cross-Cultural; and Sociometric.

UNIT-II

Attitude: Formation, Functions and Factors contributing on Change of Attitude

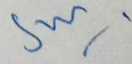
Social Influence: Conformity, Compliance and Obedience

Helping Behavior- Altruism and Pro-Social Behavior

UNIT-III

Community psychology: Nature, and Scope.

Use of small groups in social action


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Arousing community consciousness and action for handling social problems;

UNIT-IV

Group decision making and leadership for social change; Effective strategies for social change.

The concepts of disadvantaged & deprivation: Social, physical, cultural and economic

Consequences of disadvantaged and deprived groups

Suggested Readings

- Alcock, J., & Sadava, S. (2014). *An Introduction to School Psychology: Global Perspectives*. New Delhi: Sage Publication.
- Baron, R. A., & Byrne, D. (2004). *Social Psychology*. Singapore: Pearson Education
- Baron, R. A., Byrne, D., & Johnson, B. T. (1998). *Exploring Social Psychology*. USA: Allyn and Bacon.
- Kloos, B., Hill, J., Thomas, E., Wandersman, A., & Elias, M. (2011). *Community psychology: Linking individuals and communities*. Nelson Education.
- Moritsugu, J., Vera, E., Wong, F. Y., & Duffy, K. G. (2019). *Community psychology*. Routledge.
- Myers, D. G., Sahajpal, P., & Behera, P. (2012). *Social Psychology*. New Delhi: Tata McGraw-Hill.
- Taylor, S. E., Peplau, L. A. & Sears D. O. (2006). *Social Psychology* (12th Ed.). Pearson. Prentice Hall.

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1. Mark Stephens, Teaching Yoga: Essential Foundations and Techniques, North Atlantic Books - 2010
2. Yoga Training Manual for School Children, Morarji Desai National Institute of Yoga, New Delhi- 2010
3. Swami Kuvalyananda Scientific Survey Yogic Poses Extract from the book Asana, Kaivalyadhama - 2006
4. Aruna Goel, Yoga Education: Philosophy and Practice, Deep & Deep Publication - 2007

पाठ्यक्रम का विषय: योग और समग्र स्वास्थ्य

Course Title: Yoga and Holistic Health
Course Code: SIAS YOGA 1303 GEC 2124

Objective of the Paper:

- To know about holistic health
- Students will equip with preventive care tools of Yoga

Outcome of the Paper: Upon successful completion of this course, students will be able to:

- Familiar with Pancha Prana, Panch kosha and Panch Mahabhutas
- Know the ways of healthy living

Unit-I परिचय - Introduction:

1. स्वास्थ्य की परिभाषा और महत्व - Definition & Importance of Health
2. स्वास्थ्य के आयाम: शारीरिक, मानसिक, सामाजिक और आध्यात्मिक - Dimensions of Health: Physical, Mental, Social and Spiritual
3. त्रिगुणों की अवधारणा-स्वास्थ्य और स्वास्थ्य-लाभ में उनकी भूमिका - Concepts of Trigunas and their role in Health and Healing
4. पञ्च-महाभूत व षट-चक्र की अवधारणा-स्वास्थ्य और स्वास्थ्य-लाभ में उनकी भूमिका - Concepts of Pancha-mahabhutas and Shat-chakra, their role in Health and Healing
5. पञ्च-प्राण व पञ्च-कोष की अवधारणा-स्वास्थ्य और स्वास्थ्य-लाभ में उनकी भूमिका - Concepts of Pancha-prana and Pancha-koshas, their role in Health and Healing

प्रायोगिक-योग / Yoga-practical

पवन मुक्तासन भाग एक, वज्रासन, दंडासन, मकरासन, पवन मुक्तासन, उदाराकर्षण, ताड़ासन, तिर्यक-ताड़ासन, कपालभाति और योगिक श्वसन/ Pawan Muktasana Part one and Vajrasana, Dandasana,

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Makarasana, Pawan Muktasana, Udrakarshana, Tadasana, Tiryaka-Tadasana, Kapalbhathi, Yogic breathing.

Unit-II - निवारक स्वास्थ्य देखभाल में योग की भूमिका - Role of Yoga in preventive health care

1. जीवन के एक तरीके के रूप में योग - Yoga as a way of life
2. मानसिक और भावनात्मक स्वास्थ्य और योग - Mental and Emotional Health and Yoga
3. स्वस्थ रहने के योगिक सिद्धांत (आहार, विहार, आचार और विचार)-Yogic Principles of Healthy Living (Ahara, Vihara, Achara and Vichara)
4. स्वस्थ जीवन के लिए योगिक सकारात्मक दृष्टिकोण (मैत्री, करुणा, मुदिता और उपेक्षा) की भूमिका - Role of Yogic Positive Attitudes (Maitri, Karuna, Mudita and Upeksha) for Healthy Living

प्रायोगिक-योग / Yoga-practical

जल नेति, अग्निसार, जालन्धर बन्ध, कटिचक्रासन, शशांकासन, नौकासन, सेतुबन्धासन, उत्कटासन त्रिकोणासन, अनुलोम-विलोम प्राणायाम / Jal Neti, Agnisara, Jalandhara Bandha, Katichkrasana, Shashankasana, Naukasana, Setubandhasana, Utkatasana Trikonasana, Anulom-Vilom Pranayama.

Unit-III - समग्र स्वास्थ्य हेतु यौगिक अवधारणा – Yogic concept of holistic health

1. त्रिदोषों की अवधारणा - Concept of Tridosha
2. स्वस्थ वृत्त और ऋतुचर्या - Swastha Vritta and Seasonal regimen
3. दिनचर्या और रात्रिचर्या - Day and Night regimen
4. समग्र स्वास्थ्य में इनकी भूमिका - Role of Yogic concept in holistic health

प्रायोगिक-योग / Yoga-practical

गत्यात्मक मेरु वक्रासन, नौका सञ्चालन, शशांकभुजङ्गासन, समकोणासन वृक्षासन, मूर्धासन, भ्रामरी प्राणायाम, ज्ञान मुद्रा, नासाग्र मुद्रा / Dynamic Meru Vakrasana, Boat Steering, Shashankabhujangasana, Samkonasana Vrikshasana, Murdhasana, Bhramari Pranayama, Jnana Mudra, Nasal Mudra.

Unit-IV - समग्र स्वास्थ्य और आहार - Holistic health and Diet

1. आहार और पोषण की अवधारणा - Concept of Diet and Nutrition
2. स्थूल पोषक तत्त्व और उनकी आवश्यकता - Macronutrients and their utility
3. सूक्ष्म पोषक तत्त्व और उनकी आवश्यकता - Micronutrients and their utility

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4. आहार का समग्र स्वास्थ्य पर प्रभाव - Impact of Diet on holistic health

प्रायोगिक-योग / Yoga-practical

तितली-आसन, सरल-धनुरासन, अर्द्ध-शलभासन, विपरीतकरणी-आसन, पद्मासना, पद-हस्तासन, पश्चिमोत्तानासन और पूर्वोत्तानासन, सीत्कारी प्राणायाम, योगनिद्रा / Butterfly-asana, Saral-Dhanurasana, Ardha-Salabhasana, Viparitakarani-asana, Padmasana, Pada-Hastasana, Paschimottanasana and Purvottanasana, Sitkari Pranayama, Yoganidra.

आवश्यक पठनीय - Essential Readings:

1. पंडित श्रीराम शर्मा आचार्य जी, चिकित्सा उपचार के विविध आयाम, अखण्ड ज्योति संस्थान, मथुरा – 1995
2. सुरेश लाल बर्णवाल, योग और मानसिक स्वास्थ्य, न्यू भारती बुक कॉर्पोरेशन, दिल्ली - 2002
3. स्वामी रामदेव, योग साधना एवं योग चिकित्सा रहस्य, दिव्य प्रकाशन-2004
4. अरुण कुमार साव और डॉ अखिलेश्वर साव, योग चिकित्सा (सिद्धांत व व्यवहार), चौखम्भा ओरिएण्टलिआ - 2019
5. कामाख्या कुमार, योग चिकित्सा संदर्शिका, श्री वेदमाता गायत्री ट्रस्ट, हरिद्वार - 2014
6. मनोरमा नीखरा, मानसिक समस्याएं योग एवं प्राणचिकित्सा, देव संस्कृति विश्वविद्यालय शान्तिकुञ्ज, हरिद्वार - 2017
7. एम.एम. गौरे, शरीर विज्ञान और योगाभ्यास, मोतीलाल बनारसीदास, नई दिल्ली – 2007
8. K.N. Udupa- Stress and its management by yoga, Motilal banarsidass publication, 1998
9. R. Nagarathna and Dr. H.R. Nagendra, Yoga and Health, Swami Vivekananda Yoga Prakashana - 2002
10. R. Nagarathna and Dr. H. R. Nagendra, Yoga for Promotion of Positive Health, Swami Vivekananda Yoga Prakashana-2004
11. Swami Satyananda Saraswati - Yogic Management of Common, Yoga Publication Trust, Munger, Bihar - 2002

सन्दर्भ ग्रंथ - Suggested Readings:

1. Sat Bir Singh Khalsa Principles and Practice of Yoga in Health Care, Sage Publishing- 2016
2. Ganesh Shankar-Classical And Modern Approaches to Yoga, Pratibha Prakashan, New Delhi
3. R.S. Bhogal -Yoga & Mental Health & Beyond, Kaivalyadham S.M.Y.S. samiti, Lonavala, 2015
4. K.S. Joshi-Speaking Of Yoga & Nature Cure Therapy, Sterling Publishers Private Ltd

Sum
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GENERIC ELECTIVE COURSE-II STRESS AND HEALTH

SAHS PSY 01 03 04 GEC 4004

Credits: 4 (Hrs/week: 4)

Total: 100 marks

Internal Assessment: 30 marks

Examination: 70 marks

UNIT-I

Stress- Its meaning, Impact and Sources. Stress Cycle. Appraisal of Stress. Coping Styles
Model of stress- GAS Model, Transaction Model, The Fight or Flight Response (Stress and Physiology)

UNIT-II

Stressors- Physical, Social, Biological, Familial and Psychological (Biopsychosocial Aspects).
Life Events and Daily Hassles. Habits and Stress. PTSD. Hardiness.

UNIT-III

Illness- Cardiovascular, Digestive, Musculoskeletal and Immune system.
Stress and Mental Health. Stress and Cancer

UNIT-IV

Assertiveness Training, Communication Skills and Time Management
Meditation and Visualization, Vipasana, Relaxation Techniques and Yoga.

Recommended Books:

1. Brehm, A. Barbara (1998): Stress Management: Increasing Your Stress Resistance. Pearson, New Delhi.
2. Sarafino, E.P. & Smith, T.W. (2012): Health Psychology: Biopsychosocial Interactions. Wiley, New Delhi.
3. Komoroff, A. L. (2008): Stress Management: Approaches for Preventing and Reducing Stress. Boston, Harvard University, Harvard Health Publication.
4. Lovallo, W.R. (2016) 3rd Edit: Stress & Health: Biological and Psychological Interactions. Sage Publication, Oklahoma, USA.

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GEC COURSES OFFERED TO PG STUDENTS OF OTHER DEPARTMENTS

TYPESETTING IN LATEX

(SPMMAT 01 02 01 GEC 2124)

UNIT I

Preparing an input file, sentences and paragraphs, the document class, sectioning, display material, running Latex, changing the type style, producing mathematical symbols and mathematical formulae, arrays, delimiters, multiline formulae, putting one thing on other, spacing in math mode.

UNIT II

Defining command and environments, producing and including graphics in a Latex file, figures and other floating bodies, lining it up in columns, table of content, cross-reference, bibliography and citation, making index and glossary, slides, overlays and notes, letters.

UNIT III

Design it yourself: document class, page style, title page, customizing the style, line and page breaking, numbering, length, spaces and boxes, formatting with boxes, centring and flushing, list making environments, changing font type size and special symbols, picture, picture environments, picture objects, text, boxes, straight lines, arrow, stacks, circles, oval, framing, curve, grid, repeat patterns.

UNIT IV

Making presentation slides in beamer class Latex, various styles in beamer presentation, dynamic slides, postscript macros for generic tex (pstricks): arguments, dimension, coordinates, angles, line styles, fill styles, custom styles, custom graphics, picture tools, text tricks, node and connection special tricks, basics of mathjax, mathjax configuration options.

Suggested Readings:

1. Leslie L. *A Document Preparation System User's Guide and Reference Manual*, Addison-Wesley Publishing Company, 2001.
2. Kottwitz, S. *LaTeX Beginner's Guide*. Packt Publishing Ltd., UK, 2011.
3. Tantau, T. User Guide to the Beamer Class, <http://latex-beamer.sourceforge.net>.
4. Oetiker, T. The Not So Short Introduction to LATEX2E, <https://tobi.oetiker.ch/lshort/lshort.pdf>.

LL.M. SEMESTER – I

Course – V: Intellectual Property Rights

SLM LAW 01 102 E 4105

Objectives:

The main aim of this course is - (a) to examine the definition and legal basis of IPRs in its broadest sense including patents, copyrights, trademarks, geographical indications, and designs; (b) to study the evolution of IPRs as an international legal norm and its implications at the global level with specific focus on the concerns of developing countries, including India. (c) to study the emerging new interpretations and consequent implementation issues relating to IPRs within multilateral and regional treaty framework and to examine and identify the conceptual and jurisprudential aspects with specific focus on cases and case studies at the national and international level. (d) to understand the implications of emerging global IPR regime on frontier research areas such as traditional knowledge, biodiversity, biotechnology, digital/computer technology, internet and domain names.

UNIT – I: Understanding Intellectual Property Rights

- Concept, Kinds and Evolution of IPR, Changing Dimensions of IPR, Globalization and IPR
- TRIPs and IPR Regime – the context, genesis and implementation issues
- WTO and Dispute Settlement Mechanism
- Enforcement of IPRs – civil, criminal and administrative remedies

UNIT – II: Law of Trademarks and Geographical Indication

- Introduction to Trade Marks Law
- Registrations of Trade Marks: Requirements for Registration, Refusal for Registrations
- Goodwill, Doctrine of Passing-off – actions and its development in India
- Domain Names Dispute and Cybersquatting
- Geographical Indications

UNIT – III: Law of Copyright and Industrial Design

- Fundamentals of Copyright, Subject Matter of Copyright, International Treaties and Conventions
- Economic Rights and Moral Rights
- Doctrine of Fair Dealing
- Neighbouring Rights
- Infringement of Copyright and Remedies
- Industrial Design: International Regime; Salient features of Design Act, 2000

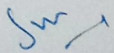
UNIT – IV: Law of Patents including Law on Protection of Bio-Diversity, Farmers Rights and Traditional Knowledge

- Evolution of Patent Law in India, Salient Features of Patent Act, 1970
- Patentability criteria, Remedies for infringement, Term of protection
- Patent in International Regime: Conventions and Treatise (Relevant Provisions under

- TRIPs Agreement, 1994)
- Protection of Traditional Knowledge, Issues of Bio-piracy – Infringements & Remedies
 - Bio-Diversity Act, 2002 (Salient Features and other Relevant Sections)
 - Salient Features of Protection of Plant Varieties & Farmer's Rights Act, 2000

Suggested Readings:

1. V.K. Ahuja, *Intellectual Property Rights in India* (Lexis Nexis, Butterworths, Wadhwa, Nagpur, 2015).
2. Alka Chawla, *Copyright and Related Rights: National and International Perspectives* (Macmillan India Ltd., Delhi, 2007).
3. Alka Chawla, *Law of Copyright: Comparative Perspectives India* (Lexis Nexis, Butterworths, New Delhi, 2013).
4. David Bainbridge, *Intellectual Property*, 9th Edition (Pearson Education, Delhi, 2012).
5. Elizabeth Verkey, *Law of Patent* (Eastern Book Company, Lucknow, 2005).
6. Holyoak & Torremans, *Intellectual Property Law* (Oxford University Press, NY, 2016).
7. Kailasam & Vedaraman, *Law of Trade Marks & Geographical Indications* (Wadhwa, Nagpur, 2009).
8. Latha R Nair and Rajendra Kumar, *Geographical Indications: A Search for Identity* (Lexis Nexis, New Delhi, 2005).
9. Lionel Bentley and Brad Sherman, *Intellectual Property Law* (Oxford University Press, New Delhi, 2003).
10. Rami M. Olwan, *Intellectual Property Rights and Development: Theory and Practice* (Springer, 2013).
11. Srividhya Ragavan, *Patent and Trade Disparities and Developing Countries* (Oxford University Press, 2012).
12. Tanya Aplin & Jennifer Davis, *Intellectual Property Rights Law* (Oxford University Press, New York, 2009).


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Semester-I

Offered to other Departments: (General Elective Course)

Paper-V-Code:(SSHPOS01(105) GEC4004

Indian National Movement

Course Objective:

It is aimed to provide opportunity for students to be familiar with the diverse vision that guided the makers of the Indian Constitution. Course is also aimed to make students learn about the different historical trajectories, movements and processes due to which we formed our constitution as it is today.

Course Outcome:

CLO 01: Students will be able to analyse the process of rise of modern India and its foundation made by social reformer and freedom fighters.

CLO 02: Students will be able to analyse social background of Indian Nationalism.

CLO 03: It will help students to illustrate the rise and growth of Economic Nationalism in India.

CLO 04: Students will acquire knowledge about the freedom struggle and partition of India and making of Indian Constitution in aftermath.

Unit-I

Colonialism in India

National Movement

Unit-II

Peasant Movements

Labour Movements

Unit-III

Revolutionary Movement

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The rise and growth of Communalism

Unit-IV

An Economic Critique of Colonialism

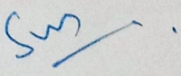
Freedom and Partition

Constitutional Development

Suggested Readings:

- Akbar, M. J. (2020). *Gandhi's Hinduism the struggle against Jinnah's Islam*. Bloomsbury Publishing.
- Azad, A. (2017). *India wins freedom: An autobiographical narrative*. Create space Independent Publishing Platform.
- Butalia, U. (2017). *The other side of silence: Voices from the partition of India*. Penguin UK.
- Dalrymple, W. (2017). *The last Mughal (Hindi)*. Bloomsbury Publishing.
- Datta, D. (2020). *Gandhi Porbandar to partition*. BEE Books.
- Guha, R. (2019). *India after Gandhi revised and updated edition: The history of the world's largest democracy*. HarperCollins.
- Habib, I. (2020). *A people's history of India 31: The national movement, Part 2: the struggle for freedom, 1919-1947*. Tulika Books.
- Hasan, M. (2016). *Roads to freedom: Prisoners in colonial India*. Oxford University Press.
- Khan, Y. (2017). *The great partition: The making of India and Pakistan*. Yale University Press.
- Naoroji, D. (2018). *Poverty and Un-British rule in India*. Franklin Classics Trade Press.
- Patel, D. (2020). *Naoroji: Pioneer of Indian nationalism*. Harvard University Press.
- Rogobete, D., & Marino, E. (2019). *The partition of India: Beyond improbable lines*. Cambridge Scholars Publishing.
- Tharoor, S. (2016). *An era of darkness: The British Empire in India*. Rupa Publications.

- Tharoor, S. (2018). *Inglorious empire: What the British did to India*. Penguin Classics.
- Arun Chandra Guha (2018) *First spark of revolution*. Orient Black swan, New Delhi
- Bipan Chandra (2016). *India's Struggle for Independence*. Penguin Books, New Delhi
- Mushirul Hasan (1981). *Communal and Pan Islamic Trends in Colonial India*. Delhi.


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SEMESTER - III

Course title: Applied Microbiology

Course code: SIAL MB 1 3 03 GEC 4004

Credit: 4

Lectures: 60

Course objective: To understand the role of microorganisms and microbial processes in welfare of humankind and too correlate the traditional microbiological techniques to microbial applications and their control.

Learning outcomes:

- Understanding of basic applications of microorganisms
- Know-how of the beneficial and harmful roles played by microbes
- Understanding of the roles of microbes in medical, environmental, industrial and food processes

Unit-I

History, applications and scope of microbiology- introduction to microscopic and pure culture techniques, microbial cell structure and functions, Microbial Growth and Control, balanced and unbalanced growth, growth curve.

Unit-II

Microbial Interactions with humans –normal microflora of human body, nosocomial infections, some common examples of food, air, water borne diseases, and their causative agents, antibiotics and Vaccines; Introduction to immunodiagnostics – RIA, ELISA.

Unit-III

Role of microorganisms in environment and agriculture, biogeochemical cycles (N, C, P), plant growth promoting bacteria, beneficial associations and interactions of microbes with microbe themselves, plant and animals, biodegradation, biodeterioration, biomineralization, bioremediation.

Unit-IV

Industrial and food applications of microbes, food fermentations (sauerkraut, tofu, tempeh, cheese, fermented milk), starter cultures, probiotics and prebiotics, industrial production of microbial biomass (baker yeast and SCP), primary (alcohol, vitamins and enzymes) and secondary metabolites (antibiotics).

Suggested readings:

1. Kuby Immunology (2018) 8th ed., Punt J, Stranford S, Jones P and Owen JA, W.H Freeman and Company, ISBN: 978-1319114701.
2. Manual of Environmental Microbiology (2016), 4th ed., Yates MV, Nakatsu CH, Miller, RV and Pillai RV, ASM Press (USA), Print ISBN: 9781555816025, e-ISBN : 9781555818821
3. Environmental Microbiology: Fundamentals and Applications (2015), 1st ed., Bertrand, JC, Caumette P, Lebaron P, Matheron R, Normand P and Sime-Ngando T, Springer Netherlands, eBook ISBN: 978-94-017-9118-2, Hardcover ISBN: 978-94-017-9117-5.
4. Environmental Microbiology (2016-17), 1st ed., Sharma, PD, Rastogi Publications (India), ISBN: 978-93-5078-140-1
5. Industrial Microbiology (2016), 2nd ed., Casida LEJR, New Age International (P) Ltd., New Delhi, India., ISBN: 9788122438024

SEMESTER – I

Course title: Techniques in Microbiology
Course code: SIAL MB 1 1 02 GEC 4004

Credit: 4
Lectures: 60

Course objective: To familiarize with General Microbiological techniques and understand their principles and to learn the applications of various techniques in identification and application of microorganisms.

Learning outcomes:

- Know-how of the basic microbiological tools and techniques
- Understanding of applications of techniques for exploitation of microbes
- Ability to grow and identify specific microorganisms

Unit-I

Isolation and cultivation of pure cultures- microbiological culture media; Maintenance of asepsis - Autoclave, Hot air oven, Filtration, Laminar air flow; Isolation of bacteria (streak plate, spread plate, pour plate, serial dilution methods) screening and enrichment techniques; preservation and maintenance of microbial cultures, general setup of microbiological laboratory.

Unit-II

Principle and applications of bright field and dark field microscopy; Microscopic measurements, Phase contrast, Interference, Differential Interference Contrast Microscopy; Fluorescence, Immunofluorescence and Confocal Microscopy; Specimen preparation in Light and Electron Microscopy; Simple staining, differential staining, acid fast staining, staining for visualization of specific microbial cell structures; SEM, TEM, and STEM.

Unit-III

Factors affecting microbial growth, Estimation of microbial growth - direct and indirect methods for determination of numbers - viable (plate) count and total (Haemocytometer) count, Estimation of microbial biomass, determination of bacterial growth rate and generation time by turbidometry method, estimation of microbial protein and enzyme activities.

Unit-IV

Tools and techniques for microbial identification and characterization – morphological characterization of microbial cells and colonies, phenotypic methods (biochemical and physiological properties); molecular biology tools for identification and characterization of microbes, measurement of microbial metabolism; detection of non-culturable microbes and metagenomics.

Suggested readings:

1. Wilson and Walker's Principles and Techniques of Biochemistry and Molecular Biology (2018), 8th ed., Hofmann A and Clokie S, Cambridge University Press (NY), Online ISBN: 9781316677056.

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Mahendergarh, Haryana -

SEMESTER-I

Course title: Clinical Biochemistry
Course code: SIAL BC 1 1 01 GEC 4004

Credit: 4
Lectures: 60

Course objective: The objectives of this course are to demonstrate how basic biochemistry and analytical chemistry can be applied to medical diagnosis, treatment and management.

Learning outcomes:

- Clinically assess the laboratory indicators of physiologic conditions and diseases
- Understanding the biochemical and molecular tools needed to accomplish diagnostic, and therapeutic intervention on hereditary and acquired disorders
- Understanding the importance of quality control and assurance to diagnostic work

Unit-I

Clinical Biochemistry - concept, definition and scope; biological samples - types, collection, processing, stability and storage; phlebotomy; serum and serum separator devices; chemical composition of biological fluids - blood, urine and cerebrospinal fluid; reference ranges.

Unit-II

Quality assurance; accuracy and precision; factors influencing the accuracy of results; Levy-Jennings's chart; reliability of a laboratory method; interferents; responsibilities of a clinical biochemist.

Unit-III

Biochemical tests in clinical practice – characteristics and uses of a biochemical test; criteria for selecting a method for biochemical analysis; enzymes as diagnostic tool; advantages and disadvantages of enzyme assays; isozymes and their diagnostic importance; methods for the detection of isoenzymes.

Unit-IV

Organ function tests - clinical presentation and diagnosis of the diseases of the liver and kidney; bilirubin metabolism; acid base disorders.

Suggested readings:

1. Clinical Biochemistry (2018) 6th ed., Murphy M, Srivastava R and Deans K, Elsevier, ISBN: 978-0702072987.
2. Clinical Biochemistry: Metabolic and Clinical Aspects (2014) 3rd ed., Marshall WJ, Churchill Livingstone, ISBN: 978-0702051401.
3. Clinical Biochemistry (Lecture Notes) (2017) 10th ed., Rae P, Crane M and Pattenden R, Wiley-Blackwell, ISBN: 111924868X.
4. Lecture Notes: Clinical Biochemistry (2010) 8th ed., Becket G, Walker SW, Race P and Ashby P, Wiley-Blackwell, ISBN: 978-1405193054.
5. Principles of Medical Biochemistry (2016) 4th ed., Meisenberg G and Simmons WH, Elsevier, ISBN: 978-03232 96168.
6. Tietz Fundamentals of Clinical chemistry and Molecular diagnostics. (2014) 7th ed., Burtis CA and Bruns DE, Elsevier, ISBN: 978-8131238851.

SEMESTER-III

Course Name - Drug Design and Discovery

Course Code - SBS CH 010308 GEC 4004

Credits: 4

Course Objective and Learning Outcomes:

This course will provide a basic understanding and fundamentals towards drug discovery and development process. At the end of this course, students will learn about the various stages involved in drug discovery & development process and challenges encounter during the course of development of new drug which finally comes into the market, various biological drug targets, mode of actions of antibiotics, cardiovascular, and psychoactive drugs and its chemical synthesis.

UNIT I: INTRODUCTION

History of drug discovery and targets: Introduction, Stages of drug discovery, lead discovery, Recent trends in drug discovery. Validation and diversity of drug targets

Biological drug targets: Drug target identification, Receptors, types, binding and activation, theories of drug receptor interaction, drug receptor interactions, agonists vs antagonists, artificial enzymes, Biopharmaceutical therapies, , Hit to lead, Clinical biomarkers.

UNIT II: DRUG DESIGN

Prodrug design: Basic concept, Carrier linked prodrugs/Bioprecursors, prodrugs of functional group, prodrugs to improve patient acceptability, Drug solubility, drug absorption and distribution, site specific drug delivery and sustained drug action. Rationale of prodrug design and practical consideration of prodrug design.

Combating drug resistance: Causes for drug resistance, strategies to combat drug resistance in antibiotics and anticancer therapy, genetic principles of drug resistance.

Analog Design: Introduction, classical & non classical, bioisosteric replacement strategies, rigid analogs, alteration of chain branching, changes in ring size, ring position isomers, design of stereo isomers and geometric isomers, fragments of a lead molecule, variation in inter atomic distance

UNIT III: ANTIBIOTICS AND CARDIOVASCULAR DRUGS

Cell wall biosynthesis, inhibitors, β -lactam rings, antibiotics inhibiting protein synthesis, Synthesis of penicillin G, amoxycillin, cephalosporin, ciprofloxacin. Introductory idea of tetracycline and streptomycin. Introduction and general mode of action. Synthesis of diltiazem, verapamil, methyldopa and atenolol.

UNIT IV: LOCAL ANTIINFECTIVE DRUGS AND PSYCHOACTIVE DRUGS

Introduction and general mode of action. Synthesis of furazolidone, naldixic acid, dapson, isoniazid, ethambutol, gluconazole, chloroquin and primaquin. Introduction, neurotransmitters, CNS depressants,

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general anaesthetics, mode of action of hypnotics, sedatives, anti-anxiety drugs, benzodiazepines, buspirone. Antipsychotic drugs – the neuroleptics, antidepressants, butyrophenones. Synthesis of diazepam, alprazolam, phenytoin and glutethimide.

Suggested Readings:

1. R. B. Silverman, The Organic Chemistry of Drug Design and Drug Action, 3rd Ed., Academic Press, 2014.
2. D. M. Brahmkar and S. B. Jaiswal, Biopharmaceutics and Pharmacokinetics, 2nd ed., Vallabh Prakashan, New Delhi, 2014.
3. G. L. Patrick, An Introduction to Medicinal Chemistry, 5th Ed., Oxford University Press, 2013.
4. D. Sriram and P. Yogeshwari, Medicinal Chemistry, 2nd ed., Pearson, 2012.
5. Ed. Robert F. Dorge, Wilson and Gisvold's Text Book of Organic Medicinal and Pharmaceutical Chemistry, 12th Ed., 2010.
6. Ed. M. E. Wolff, Burger's Medicinal Chemistry and Drug Discovery, Vol. 1, 7th Ed., John Wiley, 2010.
7. S. S. Pandeya and J. R. Dmmock, An Introduction to Drug Design, 1st Ed., New Age International, 1999.

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M.Sc. Geography Semester - III
Course Title- Geography of India
Course code- SEE GEO 1 3 05 GE 3104

Credit - 4

Course Outline

Unit I

Introduction: Geological structure and Physiographic Regions, Drainage Systems, Climatic Characteristics, Natural Vegetation and Soil

Unit II

Agriculture: nature, problems and prospects; Infrastructure: irrigation, power, fertilizer; Green revolution and its socio-economic and ecological implications; Recent trends in agriculture

Industry: Industrial complexes and industrial regions, New industrial policy

Unit III

Population: Growth, distribution and composition (Literacy, Sex, Age, work structure, etc.); Population problems and policies

Unit IV

Development of transport and Information technology, Contemporary Issues: Environmental Pollution and degradation, Regional Disparities in regional Development, globalization and Indian Economy

Recommended Books:

1. Centre for Science & Environment (1988): *State of India's, Environment*, New Delhi.
2. Deshpande, C.D. (1992): *India: A Regional Interpretation*, ICSSR & Northern Book Centre, New Delhi.
3. Dreze, J. & Sen A. (ed.) (1996): *India's Economic Development and Social Opportunity*, Oxford University Press, New Delhi.
4. Gautam, A. (2009): *Advanced Geography of India*, Second Edition, Sharada Pustak Bhawan, Allahabad.
5. Husain, M. (2008): *Geography of India*, Tata McGraw-Hill, New Delhi.
6. Khullar, D.R. (2006): *India: A Comprehensive Geography*, Kalyani Pub., New Delhi.
7. Kundu A. and Raza, M. (1982): *Indian Economy: The Regional Dimension*. Spectrum Publishers, New Delhi.
8. Robinson, F. (1989): *The Cambridge Encyclopedia of India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan & Maldives*, Cambridge University Press, London.
9. Singh R.L. (ed.) (1971): *India-A Regional Geography*, National Geographical Society of India, Varanasi.
10. Spate, O.H.K. & Learmonth, A.T.A. (1967): *India & Pakistan*, Methuen, London.
11. Tirtha R. & Krishan, G. (1996): *Emerging India*, Rawat, Jaipur.
12. Tiwari, R.C. (2010): *Geography of India*, Prayag Pustak Bhawan, Allahabad

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पाठ्यक्रम: अस्मितामूलक साहित्य

पाठ्यक्रम कोड: SLLCH HND 1 3 04 GE 4004

इकाई	पाठ्यक्रम
1.	अस्मिता की अवधारणा स्मृति, इतिहास और अस्मिता अस्मिता और सत्ता धर्म और अस्मिता
2.	अस्मितामूलक आंदोलन, मुक्ति की आकांक्षा और स्वर, सहानुभूति बनाम स्वानुभूति
3.	तुलसीराम: मुर्दहिया ओमप्रकाश वाल्मीकि : ठाकुर का कुआँ, सदियों का संताप निर्मला पुतुल: आदिवासी स्त्रियाँ, उतनी दूर मत ब्याहना बाबा
4.	महादेवी वर्मा : श्रृंखला की कड़ियाँ(कोई एक अध्याय) सिमोन द बोउवा : स्त्री उपेक्षिता (प्रथम अध्याय)

संदर्भ पुस्तकें :

- दलित दृष्टि : गेल ओमवेट, वाणी प्रकाशन, नई दिल्ली
- आधुनिकता के आईने में दलित : सं. अभय कुमार दुबे, वाणी प्रकाशन, नई दिल्ली
- अस्मिताओं के संघर्ष में दलित समाज: ईश कुमार, अकादमिक प्रतिभा, नई दिल्ली
- दलित कविता का संघर्ष : कंवल भारती, स्वराज प्रकाशन, नई दिल्ली
- आदिवासी साहित्य यात्रा : सं. रमणिका गुप्ता, राधा कृष्ण प्रकाशन, नई दिल्ली
- दलित साहित्य का सौंदर्यशास्त्र : शरण कुमार लिम्बाले, वाणी प्रकाशन, नई दिल्ली

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OFFERED TO OTHER DEPARTMENTS – SEMESTER III

INTRODUCTION TO ADVERTISING

Course Code- SLM MGT 01 301 GEC 2023

Credit: 3

Objective:

The aim of this course is to acquaint the students with concepts and techniques of advertising. Course will also introduce the student to the application of concepts for developing effective advertising programme.

Course Contents:

UNIT I

Advertising: Concept, Types, Forms and Importance; Role of advertising in the Marketing Process: Legal Ethical and Social Aspects of Advertising.

UNIT II

Theory of Cognitive Dissonance and Cues for Advertising Strategies; Concept of STP & advertising; Advertising and Consumer Behaviour; Advertising Planning and Objective Setting: DAGMAR Approach.

UNIT III

Determination of Target Audience; Building of Advertising Programme - Message, Headlines, Copy, Logo, Illustration, Appeal, Layout; Campaign Planning,

UNIT IV

Role of Creativity in Advertising; Media Planning, Media Mix; Budgeting; Measurement of Advertising Effectiveness.

Suggested Readings:

1. Batra, Rajeev, Myers, Johan G. and Aaker, David A. (2002). *Advertising Management*. (4th ed). New Delhi: Prentice Hall of India.
2. Belch, G. E., Belch, M., & Purani, K. (2013). *Advertising and Promotion : An Integrated Marketing Communications Perspective (SIE)* (9 ed.). New Delhi: McGraw Hill.

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CK FOR MAIN CONTENT TABLE

Latex for Science and Mathematics

Scheme Version: 2019	Name of the subject: Latex for Science and Mathematics	L	T	P	C
	Applicable to Programs: M.Sc. Physics	2	0	4	4
Subject Code: SPMS PHY 01 201 GEC 2044	Prerequisite: Mathematics	Total hours = 60			
	Semester II				

Course Aim : To impart knowledge to student about different tools used in writing scientific/mathematical literature.

UNIT I

Software installation, Markup Languages

UNIT II

LATEX typesetting basics, LATEX math typesetting

UNIT III

Tables and matrices, Graphics, Packages, User definable

UNIT IV

Document classes, text bibTEX, beamer, flash cards / CV, Creating your own package, Project.

Course Outcome : The student would be able to write CV, documents, books, reports, thesis and seminar presentations using latex.

References:

1. **Helmut Kopka & Patrick W. Daly**, Guide to LATEX. Addison-Wesley Professional; 4th Edition (December 5, 2003)
2. **Stefan Kottwitz**, LaTeX Beginner's Guide, Packt Publishing, UK. 1st Edition, 2011
- 3 Resources from websites. :
The not so short introduction to LaTeX - Tobi Oetiker

<https://tobi.oetiker.ch/lshort/lshort.pdf>

Attested
SM

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