



Amity School of Architecture & Planning (ASAP)

Bachelor of Interior Design

Programme Code: BID

Duration – 4 Years Full Time

**Programme Structure
Curriculum
&
Scheme of Evaluation**
(Effective from 2017-2021 Batch)

PREAMBLE- BID Four Year Course at ASAP AUR

Amity University aims to achieve academic excellence by providing multi-faceted education to students and encourage them to reach the pinnacle of success. The University has designed a system that would provide rigorous academic and professional programme with necessary skills to enable a student to excel in career.

This booklet contains the Programme Structure, the Detailed Curriculum and the Scheme of Examination. The Programme Structure includes the courses (Core and Elective), arranged semester wise. The importance of each course is defined in terms of credits attached to it. The credit units attached to each course has been further defined in terms of contact hours i.e. Lecture Hours (L), Tutorial Hours (T), Practical Hours (P) and St Studio. Towards earning credits in terms of contact hours, 1 Lecture and 1 Tutorial per week are rated as 1 credit each and 2 Practical hours per week are rated as 1 credit. Thus, for example, an L-T-P/St structure of 3-0-0 will have 3 credits, 3-1-0 will have 4 credits, and 3-1-2 will have 5 credits.

The Curriculum and Scheme of Examination of each course includes the course objectives, course contents, scheme of examination and the list of text and references. The scheme of examination defines the various components of evaluation and the weightage attached to each component. The different codes used for the components of evaluation and the weightage attached to them are given below. Depending upon the course requirement, the weightage may slightly vary.

<u>Components</u>	<u>Codes</u>	<u>Weightage (%)</u>
Case Discussion/ Presentation/ Analysis	C	05-10
Home Assignment	H	05-10
Project	P	05-10
Seminar	S	05-10
Viva	V	05-10
Quiz	Q	05-10
Class Test	CT	10-15
Attendance	A	05
End Semester Examination	EE	50

The Bachelor of Interior Design (B.I.D.) course is a professional course spanning duration of FOUR Years. The course is governed by the guidelines laid by the UGC for the Professional Courses. The course structure, scheme of examination and the syllabus was discussed and finalized in the Board of Studies meetings of the ASAP held on time to time to take the necessities of the changing times. The present Course structure was revised in the 6th BOS Held on 20.10.2016 and approved in the 20th Academic Council 19.11. 2016.

In the first year of learning the subjects are same as that in B Arch Course. This helps the students in learning the basics of design and the intricacies of the drafting. The students are introduced to the different materials and the services essential in the interior design.

There are many subjects that are taught right from the First Semester to the Seventh Semester and have varying credits. This continuity shows importance of the subject and the credits assigned reflect importance of the same. For example Interior Design is the most important subject of the Course. This subject has the maximum credits as well as the maximum teaching hours assigned to it with an idea that the students get exposure in handling problems of different complexities. The complexity is least in the first semester where basics and methodologies are introduced. In the coming semesters more and more difficult problems are introduced. The final design or the thesis project is the ultimate design where all aspects of design, construction and services including the impact of training shall be assessed. This shall show how professional project drawings are prepared and how its related report is prepared and submitted. The final project should be done in a way that anybody could understand the project, even in absence of the designer. The final is a kind of full dress rehearsal for joining the profession.

The course has an inbuilt component of training. Training for a period of ONE semester has been incorporated at the 7th Semester level with the idea that the students could get best advantage of it

while preparing Final project in the 8th semesters. The courses of studies have been revised in a manner that the students get best advantage of teaching and training in achieving the goals of profession. This shall also help the evaluators at ASAP to judge the impact of training on the academics.

History is very important to know our own roots. It also helps us to understand the development. Architecture is known as mother of all arts and Interiors are inherent part of the same. The two are inseparable. Interiors have always been part and parcel of architecture and its requirement comes only with the effluence. The students are introduced to architecture and the history of interiors is discussed in detail.

A large flexibility has been incorporated in the Course Structure through introduction of the CBCS and the student is allowed to select Choice Based Credits from within the School as well as from other schools of the University. If a student learns the same subject in consecutive 3 years he gets a Minor Track Certificate at the end of the studies.

AUR hopes that the students passing out of ASAP shall be fully equipped to face and handle independently the intricacies of interior design and shall efficiently and proficiently help in Nation Building.

PROGRAMME STRUCTURE

FIRST SEMESTER

Course Code	Course Title	Category	L / T / P / ST Per Week			Credits	Exam hrs
			L Per Week	T Per Week	P/ST Per Week		
BID 101	Design Principles	CC	1	2	4	5	6
BID 102	Materials & Construction Techniques - I	CC	1	1	2	3	3
BID 103	Art & Graphics- I	CC	1		2	2	3
BID 104	Graphics Skills -I	CC	2	1		3	3
BID 105	History of Interior Design - I	CC	1	1		2	3
BID 106	Workshop	CC	1		2	2	3
BID 107	Theory of Design	CC	2	1		3	3
BCS 101	English	VA	1			1	3
BSS 101	Behavioural Science – I		1			1	3
	Foreign Language - I	VA					
FLF 101	French						
FLG 101	German						
FLS 101	Spanish	VA	2			2	2
FLJ 101	Japanese						
FLC 101	Chinese						
	Minor Track	OE	3			3	3
	TOTAL		16	6	10	27	

Note: Study tours to be conducted during semester break. Marks to be added in consecutive Even Semester

SECOND SEMESTER

Course Code	Course Title	Category	L / T / P / ST Per Week			Credits	Exam hrs
			L Per Week	T Per Week	P/ST Per Week		
BID 201	Interior Design – I	CC	1	2	4	5	6
BID 202	Materials & Construction Techniques - II	CC	1	1	2	3	3
BID 203	Art & Graphics- II	CC	1		2	2	3
BID 204	Graphics Skills -II	CC	3			3	3
BID 205	History of Interior Design - II	CC	1	1		2	3
BID 206	Building Services - I	CC	1	1		2	3
BID 207	Study Tour & Other Academic/ Professional Activities- I (Evaluation)	CC	1			1	Viva Voce
EVS 201	Environment Science		2	2		4	3
BCS 201	English	VA	1			1	3
BSS 201	Behavioural Science – II		1			1	3
	Foreign Language - II	VA					
FLF 201	French						
FLG 201	German						
FLS 201	Spanish	VA	2			2	2
FLJ 201	Japanese						
FLC 201	Chinese						
	Minor Track	OE	3			3	3
	TOTAL		18	7	8	29	

THIRD SEMESTER

Course Code	Course Title	Category	L / T / P / ST Per Week			Credits	Exam hrs
			L Per Week	T Per Week	P/ST Per Week		
BID 301	Interior Design- II	CC	1	2	4	5	6
BID 302	Materials & Construction Techniques - III	CC	1	1	2	3	3
BID 303	Art and Graphics – III	CC	1		2	2	3
BID 304	Graphics Skills- III	CC	3			3	3
BID 305	History of Interior Design – III	CC	1	1		2	3
BID 306	Building Services- II	CC	1	1		2	3
BID 307	Furniture Design Workshop - I	CC	1		2	2	3
Elective – I (Select any One)							
BID 308	Colours						
BID 309	Vernacular Architecture	DE	1	1		2	3
BID 310	Adobe Construction						
BCS 301	Communication Skills - I		1			1	3
BSS 301	Behavioural Science – III		1			1	3
	Foreign Language - III						
FLF 301	French	VA					
FLG 301	German						
FLS 301	Spanish		2			2	2
FLJ 301	Japanese						
FLC 301	Chinese						
	Minor Track	OE	3			3	3
TOTAL			17	6	10	28	

Note: Study tours to be conducted during semester break. Marks to be added in consecutive Even Semester

FOURTH SEMESTER

Course Code	Course Title	Category	L / T / P / ST Per Week			Credits	Exam hrs
			L Per Week	T Per Week	P/ST Per Week		
BID 401	Interior Design – III	CC	1	2	4	5	6
BID 402	Materials & Construction Techniques - IV	CC	1	1	2	3	3
BID 403	Art and Graphics – IV	CC	1		2	2	3
BID 404	Graphics Skills –IV	CC	3			3	3
BID 405	Furniture Design Workshop – II	CC	1		2	2	3
BID 406	Building Services – III	CC	1	1		2	3
BID 407	Study Tour & Other Academic/ Professional Activities- II (Evaluation)	CC	1			1	Viva Voce
Elective – II (Select any One)							
BID 408	Bamboo Architecture	DE					
BID 409	Interior Documentation		1	1		2	3
BID 410	Barrier Free Architecture (Enable Design)						
BCS 401	Communication Skills – II		1			1	3
BSS 401	Behavioural Science – IV		1			1	3
	Foreign Language - IV						
FLF 401	French	VA					
FLG 401	German						
FLS 401	Spanish		2			2	2
FLJ 401	Japanese						
FLC 401	Chinese						
	Minor Track	OE	3			3	3
TOTAL			17	5	10	27	

FIFTH SEMESTER

Course Code	Course Title	Category	L / T / P / ST Per Week			Credits	Exam hrs
			L Per Week	T Per Week	P/ST Per Week		
BID 501	Interior Design – IV	CC	1	2	4	5	6
BID 502	Materials & Construction Techniques - V	CC	1	1	2	3	3
BID 503	Estimation & Specifications	CC	1	1		2	3
BID 504	Graphics Skills – V	CC	3			3	3
BID 505	Interior Project Management	CC	2	1		3	3
BID 506	Building Services - IV	CC	1	1		2	3
Elective – III (Select any One)							
BID 507	Building Appreciation	DE	1	1		2	3
BID 508	Energy Conservation Architecture						
BID 509	Digital Architecture						
Elective – IV (Select any One)							
BID 510	Intelligent Buildings	DE	1	1		2	3
BID 511	Vaastu in architecture						
BID 512	Architecture pedagogy						
BCS 501	Communication Skills – III	VA	1			1	3
BSS 501	Behavioral Science – V	VA	1			1	3
	Foreign Language – V						
FLF 501	French						
FLG 501	German	VA	2			2	2
FLS 501	Spanish						
FLJ 501	Japanese						
FLC 501	Chinese						
	Minor Track	OE	3			3	3
TOTAL			18	8	6	29	

Note: Study tours to be conducted during semester break. Marks to be added in consecutive Even Semester

SIXTH SEMESTER

Course Code	Course Title	Category	L / T / P / ST Per Week			Credits	Exam hrs
			L Per Week	T Per Week	P/ST Per Week		
BID 601	Interior Design – V	CC	1	2	4	5	6
BID 602	Advanced Construction Techniques- VI	CC	1	1	2	3	3
BID 603	Professional Practice	CC	1	1		2	3
BID 604	Dissertation	CC	3			3	3
BID 605	Building Services- V	CC	2	1		3	3
BID 606	Study Tour & Other Academic/ Professional Activities- III (Evaluation)	CC	1	1		2	3
Elective – V (Select any One)							
BID 607	Architectural Conservation	DE	1	1		2	3
BID 608	Modular Construction Technology						
BID 609	Architectural Photography						
Elective – VI (Select any One)							
BID 610	Bionic Architecture	DE	1	1		2	3
BID 611	Interior Landscape						
BID 612	Design of logo & Signages						
BCS 601	Communication Skills – III	VA	1			1	3
BSS 601	Behavioral Science – V	VA	1			1	3
	Foreign Language – V						
FLF 601	French						
FLG 601	German	VA	2			2	2
FLS 601	Spanish						
FLJ 601	Japanese						
FLC 601	Chinese						
	Minor Track	OE	3			3	3
TOTAL			18	8	6	29	

Note: Study tours to be conducted during semester break. Marks to be added in consecutive Even Semester

SEVENTH SEMESTER

Course Code	Course Title	Category	L / T / P / ST Per Week			Credits	Exam hrs
			L Per Week	T Per Week	P/ST Per Week		
BID701	Professional Training (Marks to be added in 7th sem. mark sheet)	CC				25	Viva voce
TOTAL			0	0	0	25	

EIGHTH SEMESTER

Course Code	Course Title	Category	L / T / P / ST Per Week			Credits	Exam hrs
			L Per Week	T Per Week	P/ST Per Week		
BID 801	Detailing of Interior	CC	1	1	4	4	3
BID 802	Project (Thesis) Elective – VII (Select any One)	CC	3	4	10	12	Viva voce
BID 803	Light & Architecture	DE	1	1		2	3
BID 804	Intelligent Interiors						
BID 805	Set Design Elective – VIII (Select any One)						
BID 806	Product Design	DE	1	1		2	3
BID 807	Cost Effective Architecture						
BID 808	Prefabrication						
BCS 801	Communication Skills – VI	VA	1			1	3
BSS 801	Behavioural Science –VIII Foreign Language - VIII	VA	1			1	3
FLF 801	French	VA	2			2	2
FLG 801	German						
FLS 801	Spanish						
FLJ 801	Japanese						
	Chinese						
TOTAL			10	7	14	24	

DESIGN PRINCIPLES

Course Code: BID 101

Credit Units: 05

End semester exam hours: 06

Course Objective:

Orientation of students to the designing of Architectural and Interior spaces.

Introduction to the fundamentals of basic design and understanding of forms and spaces .

Student shall understand space division composition and aesthetics of composition in 2D/3D design.

Course Contents:

Module I: Composition of simple 2D form

Introduction to simple spaces in 2D, Composition of simple 2D spaces, rectangle square circle triangular pentagon hexagon etc.

Module II: Composition of simple 3D form

Simple 3D Spaces, Composition of 3D spaces using cube, cylinder, sphere, prism, frustum of cone etc.

Module III: Transformations of 2D to 3D Spaces

Transformations of 2D to 3D - space, Scale and Proportions of space. Positive and Negative spaces, Additive and Subtractive spaces.

Module IV: Transformations of 3D to 2D

Development of Basics of plan, section and elevation of 3d form.

Module V: Anthropometrical study

Anthropometrical study of space, Design of Anthropometrics Cell with minimum space requirements of single unit for a single person and study the interior spaces by making 3-D views (axonometric and isometric). This exercise will include areas like living area, sleeping area, washroom, cooking area with furniture layout in 2-D /3D drawings

Module VI: Design Exercise

Design single unit cell for a single person with using concepts of Symmetry, Asymmetry, extension of lines, Rhythm, Balance and Harmony, anthropometry considerations and study the interior spaces by making 3-D views (axonometric and isometric). This exercise will include areas like living area, sleeping area, washroom, cooking area with furniture layout in 2-D /3D drawings.

Exercises: Cabin design, entrance gate, bus stop, kiosks, exhibition space, stalls, children play area, small interior spaces, etc. The final submission shall necessarily include a model for at least one of the two main problems.

Examination Scheme:

Components	A	S1	S2	CT	Viva	EE
Weightage (%)	05	15	20	10	20	30

Text & References:

Text:

- Pattern of Nature, Peter Streens
- Elements of Architecture, Meiss Pieree Von
- Architecture: Form, Space and Order, Francis D.K. Ching
- Interior design illustrated , Francis D.K. Ching

References:

- Planning – the Architect’s handbook, E and E.O.
- Neufert’s Architect’s data
- Interior Design Visual, Maureen Mitton 2nd Edition

MATERIALS AND CONSTRUCTION TECHNIQUES-I

Course Code: BID 102

Credit Units: 03

End semester exam. hours: 03

Course Objective:

To understand the use of traditional building materials in simple building works.

To familiarize students with basic building elements, their function and behavior under various conditions with specific reference to “Load Bearing Construction”

Course Contents:

Module I: Clay and Clay products

Mud including stabilized earth, burnt bricks, brick tiles, blocks, Classification, availability, preparation and uses of above materials and their structural, visual and textural properties. their use in construction and furnishing work.

Brick Work: Terminology: Bricks, Bats and Closures.

Bonding: Types of bonds: English, Single, double, Flemish and rat trap bond.

Corbelling, String courses and decorative brickwork.

Module II: Stone, Lime

lime and its product, stone and its varieties etc, Classification, availability, preparation and uses of above materials and their structural, visual and textural properties. Their use in construction and furnishing work.

Stonework: Stone masonry, dressing, Random Rubble, Coursed Rubble, Ashlar.

Module III: Stone and Brick masonry Foundation

Foundations: Need for foundations, its preliminary design criteria and construction system.

Detail of spread foundation for load bearing walls of various thicknesses.

Module IV: Openings

Openings – Types and construction details of Lintels, arches, sill, jam.

Doors and windows – joinery and fixing details of simple timber doors and windows.

Module V: Elements of building

Introduction to elements of building from foundation to roof. Foundation, plinth, plinth beam, damp proof course (D,P.C.) ,sill, lintel ,beam and slab, parapet, mumty etc. Detailed Section through 2 story building.

Exercises: Preparation of construction drawings on above topics.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Building construction W.B.McKay

Building construction R Berry

Building construction Chudley

Building construction Francis D.K. Ching.

ART & GRAPHICS – I

Course Code: BID 103

Credit Units: 02

End semester exam. hours: 03

Course Objective:

The course will enable the students to develop an understanding of the elements of art; a basic vocabulary for describing visual art, a general understanding of the role art has played throughout history, and contemporary trends.

Course Contents:

Module I: The Language of Visual Experience

Visual elements, Principles of design, evaluating art and its purpose in simple exercise of sketching .

Module II: Art as Cultural Heritage

From the earliest art to the Bronze Age, The Classical and Medieval West, Renaissance and Baroque Europe, Traditional arts of Asia, the Islamic world and eastern world. Sketches of buildings from history.

Module III: The Modern World & The Postmodern World

Late Eighteenth and Nineteenth Centuries, Early Twentieth Century, Modern art Movements
Post modernity and Global Art .Sketches , painting based on history

Module IV: Art Factors Influencing Architecture

Various art factors influencing the architecture, Study can be made by taking a particular region, preferably India. Evolution of shelter forms in regions of the world and examples of Vernacular Architecture in the world, with particular reference to India.

Module V: Rendering in different mediums

Application of painting techniques –water/oil, pen & ink, pencil in preparation of Exterior & interior Views

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Lazzari, Margaret and Donna Schlesier. Exploring Art. 2nd Edition. Clark Baxter, Belmont, CA, 2005.
- Responding to Art: Form, Content, & Context by Robert Berson.
- Space, Time and Architecture: The Growth of a New Tradition, Fifth Revised and Enlarged Edition (The Charles Eliot Norton Lectures) by Sigfried Giedion.
- A Pattern Language, by Christopher Alexander.
- Atlas of Western Art History: Artists, Sites and Movements from Ancient Greece to the Modern Age by John Steer and Antony White
- Postmodernism (Movements in Modern Art) by Eleanor Heartney
- Elements of Architecture, Meiss Pieree Von

GRAPHIC SKILLS -I

Course Code: BAR 104

Credit Units: 03

Teaching hours: 04

Course Objective:

To familiarize the students with various drawing tools to give basic knowledge of drafting and lettering techniques. To provide a clear understanding about the scale of measurement and orthographic projections used as drawing technique.

Course Contents:

Module I: Introduction to basics drafting, Lettering & Scales

Introduction and setting to the drawing equipment, Concept of line, its types, Line thickness quality, grade, divisions and angles, Concept of polygons, circles, geometrical curves, helix etc., Concept of Dimensioning & dimension line, BIS codes of drawings.

Free hand and Architectural lettering, proportion of letter size as per scale and size of the sheet.

Scales: Engineers scale, Graphical scale and Representation factor (R.F). Scales on drawings. Types of scales: Plain scale and Diagonal scale.

Module II: Projection- Line

Definition, meaning and concept, Principles and Methods of projection. Projection of point & line.

Module III: Projection-Plane

Projection of planes and surfaces in different positions and angles with varying situations.

Module IV: Projection-Solid

Projections of regular rectilinear and circular solids (prisms, pyramids, cones, cylinders, spheres etc.) in different positions. Sections of regular rectilinear and circular solids in varying conditions of sectional plane.

Module V: 3D Drawing

Types, uses & advantage. Isometric, Axonometric & oblique view -solids, compositions & buildings. Metric drawings, projections and their dimensions.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- Architectural Graphics, C. Leslie Martin
- Architectural Graphics, Ching Frank
- Engineering Drawing, N.D. Bhatt

References:

- A.J. Metric Handbook, editors, Jan Bilwa and Leslie Fair weather
- Architectural Graphic standards editor, Boaz Joseph
- Neufert's Architect's data
- Time Saver standards for building types, Editor Joseph D.C. and John Callender.
- Rendering with pen and ink
- Practical Plane and Solid Geometry, H. Joseph and Morris

HISTORY OF INTERIOR DESIGN - I

Course Code: BID 105

Credit Units: 02

End semester exam. hours: 03

Course Objective:

The course focus on the study of developmental aspects of Interior designing over the time period in different periods of history of mankind. The students shall learn importance of Interior and its development.

Course Contents:

Module I: Introduction & Relevance

Study and importance of Interior design since ancient periods.

Module II: Art & Art work of Prehistoric period and Early Civilizations

Development of Cave Art & Art work in prehistoric period and early civilizations like Indus Valley Civilization, Harappa Culture

Module III: Art & Art work Egyptian Period

Egyptian period- Temple Interiors, materials Used, Importance of colours, Hieroglyphics, Sculptures.

Module IV: Art & Art work of Classical Period

Greek and Roman Orders. Arts and crafts in Greek and Roman Era.

Module V: Art & Art work of Western Period

Early Christian , Byzantine and Romanesque Period. Architecture and Interior Design Elements and art-forms.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- The History of Arch. in India, Chrictophes Tadjell
- Interior design & space planning, Dechiara Pabero Zelnik
- Interior design illustrated , Francis D.K. Ching

References:

- Islamic Architecture in Interior, Satish Grover
- The Best Interior India, Anuradha Mahindra
- Indian Interior, Angelika Taschen

WORKSHOP

Course Code: BID 106

Credit Units: 02

End semester exam. hours: 03

Course Objective:

To introduce various fabrication skill and techniques to produce scale –models and to encourage preparation of models as an essential phase in design development and evaluation.

Course Contents:

Module I: Introduction to model-making

Need, role of scale models in design, general practices

Essentials of model-making, understanding of various tools And machines employed, best practices involved in operating the tools and the techniques.

Module II: Materials for model-making

Introduction of various materials available for model making such as papers, mount boards, mount-sheets, wood, plastics, films, Plaster of Paris, acrylic sheets ,metal, glass, FRP etc.

Potential of these materials, in model-making.

Module III: Techniques of scale-modeling

Use of different scale, templates, measuring aids, conventions followed.

Techniques for preparation of presentation models, mock-ups, simulation of various materials and textures such as wood ,glass, aluminium, steel, bricks, roofing tiles, flooring, etc.

Models with soft materials like; clay, plaster of Paris etc.

Models of shells & membrane structures by use of canvas molding cloth

Module IV: Carpentry

Introduction to carpenter's tools, Wood working machines, use of different kinds of wood, Sawing, Planning and Shaping of wood, Making of selected joinery used in construction work, polishing of wood.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- Architectural Models: Construction Techniques – Wolfgang Knoll, Martin Heching
- Carpentry and joinery – [Sir Banister Fletcher](#), [Herbert Phillips Fletcher](#)

References:

- The aesthetic experience –magnet Jacque
- Form, Space & Order – D.K Ching.
- Object by Architects – tapert,Annette,swid powell
- Art Forms – Preble,duame

THEORY OF DESIGN

Course Code: BID107
End semester exam. Hours: 03

Credit Units: 03

Course Objective:

Understanding the need of the subject. basic information about the architecture and interior design and philosophical developments in design. Understanding about the principle, elements of architecture and its application.

Course Contents:

Module I: Theory

Definitions of Architecture –Origin of Architecture–context for architecture as satisfying human needs: functional, aesthetic and psychological-outline of components and aspects of architectural form-site, structure, skin, materials, services, use, circulation, expression, character.

Introduction to the formal vocabulary of architecture and Gestalt ideas of visual

perception. **Module II: Elements of Architecture & Interior Design**

Understanding fundamental elements such as point, line, plane, form and space (negative and positive space), shape, pattern, light, Shadow, colour, surface and texture. The notion of Form follows Function and Function follows Forms and its theoretical ideology.

Module III: Principles of Architecture & Interior Design

Understanding fundamental principles such as proportion, scale, balance, symmetry/asymmetry, rhythm, axis, hierarchy, datum, unity, harmony, dominance etc. in design and compositions.

Small exercises based on application of skills, colour theory, elements and principles of composition and

design. **Module IV: Design theory by Master Architect's & Designers**

Role of individual architects in the generation of architectural form, through study of exemplary work, architectural inspirations, philosophies, ideologies and theories of architects (Frank Lloyd Wright, Le Corbusier, Ludwig Mies van der Rohe, Frank Gehry).

Works of the great masters of the period in India i.e.- Charles Chorrea, B.V. Doshi, Raj Rewal, Achyut Knvinde, Hafeez Contractor etc.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- “Glimpses of World History” by Pt. Jawahar Lal Nehru
- “Urbain Pattern” by A.B. Gallion
- “The History of Architecture” by Sir Bannister Fletcher
- Modern Architecture by Curtis W.J.
- The History of Architecture by Tadgel C.

References:

- History of Architecture – J E Swain
- History of Architecture by Dora Couch
- A study of History – Almond Toynbee
- Traditions in Architecture – Dora Couch

Course Objective:

The course is intended to give a foundation of English Language. The literary texts are indented to help students to inculcate creative & aesthetic sensitivity and critical faculty through comprehension, appreciation and analysis of the prescribed literary texts. It will also help them to respond form different perspectives.

Course Contents:

Module I: Vocabulary	Use of Dictionary Use of Words: Diminutives, Homonyms & Homophones
Module II: Essentials of Grammar - I	Articles Parts of Speech Tenses
Module III: Essentials of Grammar - II	Sentence Structure Subject -Verb agreement Punctuation
Module IV: Communication	The process and importance Principles & benefits of Effective Communication
Module V: Spoken English Communication	Speech Drills Pronunciation and accent Stress and Intonation
Module VI: Communication Skills-I	Developing listening skills Developing speaking skills
Module VII: Communication Skills-II	Developing Reading Skills Developing writing Skills Module VIII: Written English communication Progression of Thought/ideas Structure of Paragraph Structure of Essays
Module IX: Short Stories	Of Studies, by Francis Bacon Dream Children, by Charles Lamb The Necklace, by Guy de Maupassant A Shadow, by R.K.Narayan Glory at Twilight, Bhabani Bhattacharya
Module X: Poems	All the Worlds a Stage Shakespeare To Autumn Keats O! Captain, My Captain. Walt Whitman Where the Mind is Without Fear Rabindranath Tagore Psalm of Life H.W. Longfellow

Examination Scheme:

Components	A	CT	HA	EE
Weightage (%)	05	15	10	70

Text & References:

- Madhulika Jha, Echoes, Orient Long Man
- Ramon & Prakash, Business Communication, Oxford.
- Sydney Greenbaum Oxford English Grammar, Oxford.
- Successful Communications, Malra Treece (Allyn and Bacon)
- Effective Technical Communication, M. Ashraf Rizvi.

*** 30 hrs Programme to be continued for Full year**

BSS 101 BEHAVIOURAL SCIENCE – I(Understanding Self for Effectiveness)**Course Code: BSS 101****Credit Units: 01****Teaching hours : 1****Course Objective:**

This course aims at imparting an understanding of:

- Understanding self & process of self-exploration
- Learning strategies for development of a healthy self esteem
- Importance of attitudes and its effective on personality
- Building Emotional Competency

Course Contents:

Module I: Self: Core Competency	Understanding of Self Components of Self – Self identity Self-concept Self confidence Self-image
Module II: Techniques of Self Awareness	Exploration through Johari Window Mapping the key characteristics of self Framing a charter for self Stages – self-awareness, self-acceptance and self-realization
Module III: Self Esteem & Effectiveness	Meaning Importance Components of self esteem High and low self esteem Measuring your self esteem
Module IV: Building Positive	Attitude Meaning and nature of attitude Components and Types of attitude Importance and relevance of attitude
Module V: Building Emotional Competence	Emotional Intelligence – Meaning, components, Importance and Relevance Positive and negative emotions Healthy and Unhealthy expression of emotions
Module VI: End-of-Semester Appraisal	Viva based on personal journal Assessment of Behavioral change as a result of training Exit Level Rating by Self and Observer

Examination Scheme:

Components	SAP	A	Mid Term Test (CT)	VIVA	Journal for Success (JOS)
Weightage (%)	20	05	20	30	25

Text & References:

- Organizational Behaviour, Davis, K.
- Hoover, Judith D. Effective Small Group and Team Communication, 2002, Harcourt College Publishers
- Dick, Mc Cann & Margerison, Charles: Team Management, 1992 Edition, viva books
- Bates, A. P. and Julian, J.: Sociology - Understanding Social Behaviour
- Dressler, David and Cans, Donald: The Study of Human Interaction
- Lapiere, Richard. T – Social Change
- Lindzey, G. and Borgatta, E: Sociometric Measurement in the Handbook of Social Psychology, Addison – Welsley, US.
- Rose, G.: Oxford Textbook of Public Health, Vol.4, 1985.
- LaFasto and Larson: When Teams Work Best, 2001, Response Books (Sage), New Delhi
- J William Pfeiffer (ed.) Theories and Models in Applied Behavioural Science, Vol 2, Group (1996); Pfeiffer & Company

FOREIGN LANGUAGE 101
FLF 101 FRENCH - I

Course Code: FLF 101

Credit Units: 02

Teaching hours : 2

Course Objective:

To familiarize the students with the French language

- with the phonetic system
- with the syntax
- with the manners
- with the cultural aspects

Course Contents:

Module A: pp. 01 to 37: Unités 1, 2, Unité 3 Objectif 1, 2

Only grammar of Unité 3: objectif 3, 4 and 5

Contenu lexical :Unité 1 : Découvrir la langue française : (oral et écrit)

1. se présenter, présenter quelqu'un, faire la connaissance des

autres, formules de politesse, rencontres

2. dire/interroger si on comprend

3. Nommer les choses

Unité 2 : Faire connaissance

1. donner/demander des informations sur une personne, premiers contacts, exprimer ses goûts et ses préférences

2. Parler de soi: parler du travail, de ses activités, de son pays, de sa ville.

Unité 3 :Organiser son temps

1. dire la date et l'heure

Contenu grammatical : 1. organisation générale de la grammaire

2. article indéfini, défini, contracté

3. nom, adjectif, masculin, féminin, singulier et pluriel

4. négation avec « de », "moi aussi", "moi non plus"

5. interrogation : Inversion, est-ce que, qui, que, quoi, qu'est-ce que, où, quand, comment, quel(s), quelle(s)

Interro-négatif : réponses : oui, si, non

6. pronom tonique/disjoint- pour insister après une préposition

7. futur proche

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- le livre à suivre: Campus: Tome 1

FLG 101GERMAN - I

Course Code: FLG 101

Credit Units: 02

Teaching hours : 2

Course Objective:

To enable the students to converse, read and write in the language with the help of the basic rules of grammar, which will later help them to strengthen their language.

To give the students an insight into the culture, geography, political situation and economic opportunities available in Germany

Course Contents:

Module I: Introduction	Self introduction: heissen, kommen, wohnwn, lernen, arbeiten, trinken, etc. All personal pronouns in relation to the verbs taught so far. Greetings: Guten Morgen!, Guten Tag!, Guten Abend!, Gute Nacht!, Danke sehr!, Danke!, Vielen Dank!, (es tut mir Leid!), Hallo, wie geht's?: Danke gut!, sehr gut!, prima!, ausgezeichnet!, Es geht!, nicht so gut!, so la la!, miserabel!
Module II: Interviewspiel	To assimilate the vocabulary learnt so far and to apply the words and phrases in short dialogues in an interview – game for self-introduction.
Module III: Phonetics	Sound system of the language with special stress on Diphthongs
Module IV: Countries, nationalities and their languages	To make the students acquainted with the most widely used country names, their nationalitie and the language spoken in that country.
Module V: Articles	The definite and indefinite articles in masculine, feminine and neuter gender. All Vegetables, Fruits, Animals, Furniture, Eatables, modes of Transport
Module VI: Professions	To acquaint the students with professions in both the genders with the help of the verb “sein”.
Module VII: Pronouns	Simple possessive pronouns, the use of my, your, etc. The family members, family Tree with the help of the verb “to have”
Module VIII: Colours	All the color and color related vocabulary – colored, colorful, colorless, pale, light, dark, etc.
Module IX: Numbers and calculations – verb “kosten”	The counting, plural structures and simple calculation like addition, subtraction, multiplication and division to test the knowledge of numbers. “Wie viel kostet das?”
Module X: Revision list of Question pronouns	W – Questions like who, what, where, when, which, how, how many, how much, etc.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Wolfgang Hieber, Lernziel Deutsch
- Hans-Heinrich Wangler, Sprachkurs Deutsch
- Schulz Griesbach, Deutsche Sprachlehre für Ausländer
- P.L Aneja, Deutsch Interessant- 1, 2 & 3
- Rosa-Maria Dallapiazza et al, Tangram Aktuell A1/1,2
- Braun, Nieder, Schmöe, Deutsch als Fremdsprache 1A, Grundkurs

FLS 101SPANISH – I

Course Code: FLS 101

Credit Units: 02

Teaching hours : 2

Course Objective:

To enable students acquire the relevance of the Spanish language in today's global context, how to greet each other. How to present / introduce each other using basic verbs and vocabulary

Course Contents:

Module I

A brief history of Spain, Latin America, the language, the culture...and the relevance of Spanish language in today's global context.

Introduction to alphabets

Module II

Introduction to '*Saludos*' (How to greet each other.How to present / introduce each other).

Goodbyes (*despedidas*)

The verb *llamarse* and practice of it.

Module III

Concept of Gender and Number

Months of the years, days of the week, seasons. Introduction to numbers 1-100,

Colors, Revision of numbers and introduction to ordinal numbers.

Module IV

Introduction to *SER* and *ESTAR* (both of which mean To Be).Revision of '*Saludos*' and '*Llamarse*'. Some adjectives, nationalities, professions, physical/geographical location, the fact that spanish adjectives have to agree with gender and number of their nouns. Exercises highlighting usage of *Ser* and *Estar*.

Module V

Time, demonstrative pronoun (*Este/esta, Aquel/aquella* etc)

Module VI

Introduction to some key AR /ER/IR ending regular verbs.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Español, En Directo I A
- Español Sin Fronteras

FLJ 101 JAPANESE - I

Course Code: FLJ 101

Credit Units: 02

Teaching hours : 2

Course Objective:

To enable the students to learn the basic rules of grammar and Japanese language to be used in daily life that will later help them to strengthen their language.

Course Contents:

Module I: Salutations

Self-introduction, Asking and answering to small general questions

Module II: Cardinal Numbers

Numerals, Expression of time and period, Days, months

Module III: Tenses

Present Tense, Future tense

Module IV: Prépositions

Particles, possession, Forming questions

Module V: Démonstratives

Interrogatives, pronoun and adjectives

Module VI: Description

Common phrases, Adjectives to describe a person

Module VII: Schedule

Time Table, everyday routine etc.

Module VIII: Outings

Going to see a movie, party, friend's house etc.

Learning Outcome

▲ Students can speak the basic language describing above mentioned topics

Methods of Private study /Self help

▲ Handouts, audio-aids, and self-do assignments and role-plays will support classroom teaching

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

Text:

- Teach yourself Japanese

References:

- Shin Nihongo no kiso 1

Course Objective:

There are many dialects spoken in China, but the language which will help you through wherever you go is Mandarin, or Putonghua, as it is called in Chinese. The most widely spoken forms of Chinese are Mandarin, Cantonese, Gan, Hakka, Min, Wu and Xiang. The course aims at familiarizing the student with the basic aspects of speaking ability of Mandarin, the language of Mainland China. The course aims at training students in practical skills and nurturing them to interact with a Chinese person.

Course Contents:

Module I	Show pictures, dialogue and retell. Getting to know each other. Practicing chart with Initials and Finals. (CHART – The Chinese Phonetic Alphabet Called “Hanyu Pinyin” in Mandarin Chinese.) Practicing of Tones as it is a tonal language. Changes in 3 rd tone and Neutral Tone.
Module II	Greetings Let me Introduce The modal particle “ne”. Use of Please ‘qing’ – sit, have tea etc. A brief self-introduction – Ni hao ma? Zaijian! Use of “bu” negative.
Module III	Attributives showing possession How is your Health? Thank you Where are you from? A few Professions like – Engineer, Businessman, Doctor, Teacher, Worker. Are you busy with your work? May I know your name?
Module IV	Use of “How many” – People in your family? Use of “zhe” and “na”. Use of interrogative particle “shenme”, “shui”, “ma” and “nar”. How to make interrogative sentences ending with “ma”. Structural particle “de”. Use of “Nin” when and where to use and with whom. Use of guixing. Use of verb “zuo” and how to make sentences with it.
Module V	Family structure and Relations. Use of “you” – “mei you”. Measure words Days and Weekdays. Numbers. Maps, different languages and Countries.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

“Elementary Chinese Reader Part I” Lesson 1-1

INTERIOR DESIGN – I

Course Code: BID 201

Credit Units: 05

End semester exam hours: 06

Course Objective:

To impart ability to design simple functional spaces by application of design principles learned in previous semester and to correlated with human.

Course Contents:

Module I: Functional Spaces

Study of functional spaces and the issues like clearances, lighting and ventilation, using the anthropometric study approach; working out of Minimum and optimum areas for various functions; Detailed study of spaces such as living, dining, bedrooms, kitchen, toilet, etc.

Module II: Human considerations

Study of the human considerations like, privacy, convenience, comfort, etc.; Case Study of an existing house through measured drawing and making plans/elevations/sections and critical appraisal of the spaces.

Module III: Design process

Introduction to design process. Pre- Design Studies: Preparation of design brief, the user requirement and their implications, Study of the site and the context; Design Response: Development of concept, Graphic tools like circulation diagrams, 2D compositions, Figure Ground studies, etc.

Module IV: Building Forms (Semi and fully built structures)

Study of creative composition, innovative design approaches & materials to enhance the imaginative spirit of Students. Basic building forms have to be studied through drawings, sketches and model.

Module V: Design Exercise

The suggested design exercise - bus shelter, milk booth, entrance gate, watchman's cabin, traffic police kiosk, flower stall, ATM Centre, small Cafeteria Village Post Office etc. emphasis shall be on the composition, aesthetics and innovation.

Exercises: At least two major exercises and two minor design/time problems should be given. The final submission shall necessarily include a model for at least one of the two main problems.

Examination Scheme:

Components	A	S1	S2	CT	Viva	EE
Weightage (%)	05	15	20	10	20	30

Text & References:

Text:

- A Visual Dictionary of Architecture, Francis D.K. Ching
- Creative Interiors (Design of Enclosed Space), Shashi Jain
- Graphic Interiors (Space Designed by Graphic Artists), Corina Dean
- Interior design illustrated , Francis D.K. Ching

References:

- Architectural Graphic standards, Boaz Joseph
- Interior Design Visual, Maureen Mitton 2nd Edition
- Illustration + Perspectives (In Pantone Colors), Eiji Mitooka
- Neufert's Architect's data

MATERIALS AND CONSTRUCTION TECHNIQUES - II

Course Code: BID 202

Credit Units: 03

Course Objective:

To acquaint the students about Timber as a building materials and to familiarize them with construction techniques for use of the above materials in building works.

Course Contents:

Module I: Timber

Classification, Characteristics, Defects and Preservation.

Module II: Timber Doors

Timber Joinery, Types, Classification and Usage.

Doors: Ledged, Braced, Batten door, flush, paneled, single and double shutter doors of various types and sizes.

Module III: Timber Windows

Types, classification and construction details

Fully glazed, fixed glass, timber louvered, bay & casement window detail, ventilators details.

Module IV: Different type of Timber products:

Soft board, hard board, ply, straw board, MDF board, saw dust, block and fine board etc.

Their manufacturing, advantages and disadvantages, market terminology, Sizes available and prices, availability and use with all the details. Report, samples, catalogs to be compiled from market survey.

Module V: Wooden Staircases & trusses

Different type of Staircases & trusses and their terminology and construction detail.

Exercises: Preparation of drawings on above topics.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Building construction W.B.McKay
- Building construction R Berry
- Building construction Chudley
- Building construction Francis D.K. Ching

ART AND GRAPHICS – II

Course Code: BID 203

Credit Units: 02

Course Objective:

The objective make the students aware of all the possible graphic skills used in interior design and provide a wider knowledge to the students about the various levels of graphic drawings. Familiarize with the principles and theories of graphics.

Course Contents:

Module I: Graphical representation

Graphical representation of furniture, human figures in 2D &3D, Rendering techniques for textures, materials, finishes, etc.

Module II: Sciography

Sciography in Interior Spaces & Furniture, Drawings solids, voids.

Module III: 3-D Graphics and Coloring

Models, 3-D forms: free standing paper models representing motives, shapes

Module IV: Painting

Theme based painting assignment.

Module V: Colored Rendering

Colored Rendering of given interior perspectives with shades and shadows using different mediums.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- A Visual Dictionary of Architecture, Francis D.K. Ching
- Creative Interiors (Design of Enclosed Space), Shashi Jain
- Interior design illustrated, Francis D.K. Ching
- Home Plumbing (The David & Charles Manual of), Ernest Hall
- House Book (The Complete Guide to Home Design), Terence Conran
- Architecture: Form, Space and Order Francis D.K. Ching

References:

- Window Fashion, Charles T. Randall
- Illustration + Perspectives (In Pantone Colors), Eiji Mitooka
- Elements of Architecture, Meiss Pieree Von
- Window Fashion, Charles T. Randall
- Illustration + Perspectives (In Pantone Colors), Eiji Mitooka
- Elements of Architecture, Meiss Pieree Von
- Architecture: Form, Space and Order, Francis D.K. Chi

GRAPHIC SKILLS - MANUAL - II

Course Code: BID 204

Credit Units: 03

End semester exam hours: 03

Course Objective:

To familiarize students the architectural drawing of solids, penetration of solids, drawing of shades, Sciography and surface development. To learn the technique of architectural rendering & graphic skills required for effective presentation. The process shall help students in learning the drawings of simple to complex objects.

Course Contents:

Module I: Penetration of Solids

Drawing of different solids in different positions, Cutting and interpenetration of different solids in different position.

Module II: Development of Surfaces

Introduction and Methods of development of surfaces. Development of lateral surfaces of right solids like Cubes, Prisms, Cylinders, Pyramid, Cone etc.

Module III: Sciography

Values in shades and shadows. Constructing plan shadows (point, line and plane), Constructing shadows in elevations (Point, line and Plane). Short- cut methods for constructing shadows.

Module IV: Perspective Drawing

Importance and use of different perspective in architecture. Differences with Metric projections, Anatomy of a perspective-cone of vision, station Points, picture plane, eye level, horizon line, ground line, vanishing point, etc. One point, Two point & three point Perspective.-simple form to building forms. Faster ways of drawing perspectives.

Module I: Advanced Rendering(dry and wet)

Presentation techniques in different types, medium and materials. Rendering perspectives in different media (Dry/water based color and ink etc.) with shading and sciography. Use of furniture, human beings in different positions and other details in interior perspectives.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- Architectural Graphics, C. Leslie Martin
- Perspective and Sciography, Shankar Mulik
- Interior Design, Ahmed Kasu
- Architectural Graphics, Ching Frank
- Engineering Drawing, N.D. Bhatt
- Engineering Drawing – P.S. Gill

References:

- A.J. Metric Handbook, editors, Jan Bilwa and Leslie Fair weather
- Architectural Graphic standards editor, Boaz Joseph
- Neufert's Architect's data
- Time Saver standards for building types, Editor Joseph D.C. and John Callender.
- Rendering with pen and ink.

HISTORY OF INTERIOR DESIGN – II

Course Code: BID 205

Credit Units: 02

End semester exam hours: 03

Course Objective:

The objective of the course is to introduce the students with the changes occurred in the past with the time. Familiarize with the different culture, society and their style of living, which effects the internal part of their buildings over different periods.

Course Contents:

Module I: Gothic, Renaissance and Baroque Period

Basic overview of Interior layouts, Sections, Architectural and Interior Design elements like Rose Window, Vaults. Apprise about architects and artists in Renaissance period.

Module II: Hindu: Temples

North and South Indian Styles and their different architectural and interior elements. Developments in Rajputana (Rajasthan) period with respect to buildings and Interiors. Art forms of India - Madhubani Paintings, Tanjore Paintings, Kalamkari Work, etc.

Module III: Buddhism

Introduction to various elements like stupas, toranas, chaityas, viharas. Artforms - paintings and Sculptures.

Module IV: Art & Art work Mughal

Developments in Mughal period with respect to buildings and Interiors. Apprise about furniture and interior finishes, elements of mosque, etc.

Module V: Oriental- Japanese and Chinese Style

Elements- Fusuma, Shoji, Tatama, Tokonoma, Zen Garden, etc. and materials used. Salient features of architecture and interiors emphasizing on traditional materials used and colour themes.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- The History of Arch. in India, Chrictophes Taddell
- Interior design & space planning, Dechiara Pabero Zelnik
- Interior design illustrated, Francis D.K. Ching

References:

- Islamic Architecture in Interior, Satish Grover
- The Best Interior India, Anuradha Mahindra
- Indian Interior, Angelika Taschen

BUILDING SERVICES - I

(WATER SUPPLY AND SANITATION)

Course Code: BID 206
End Sem. Exam. Hours: 03 Hours

Credit Units: 02

Course Objective:

To acquaint students to basic principles of water supply, sanitation and plumbing bye laws and systems. To assist them in design of plumbing systems at building to town level for different typologies.

Course Contents:

Module I: Water supply

Introduction to water supply- sources of water; impurities, purification and treatment of water, Need to protect water and requirements of water supply for different building types- storage, distribution. Sources and methods of water supply and distribution; schematic making of an overhead water reservoir for a town/city.

Module II: Drainage systems

Concept, design and detailing of drainage systems at micro and macro level- Introduction to municipal drainage systems at town level, Building/ Site planning for drainage systems, Rainfall, Storm water drains, gullies, open drains (construction, gradients, ventilation and maintenance etc.). Concept, design and detailing of rainwater harvesting systems. Self-cleansing velocity, invert levels, drains on sloping sites, sewage disposal system in unsewered localities- septic tank, soak pits, cesspools, aqua-privy, leeching pits for individual building of urban and rural areas.

Module III: Sanitation- Sewerage

Purpose and principles, collection and conveyance of waste matter. Sewage treatment plants and bye products. Sewage system design at building and town level. Sanitary appliances, fixture, traps, pipes and joints, drainage in non-municipal areas. Plumbing bye laws. Plumbing design of a toilet and kitchen

Module IV: Sanitation- Solid waste management

Garbage types, collection and disposal- Purpose and methods (Incinerator, Dry disposal etc.). Garbage disposal in multistorey buildings, Treatment of industrial refuse, Refuse and pollution problems. R4 of waste management.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- Water supply, waste disposal and environmental engineering, Chatterjee
- Water supply and sanitary engineering, Singh
- Water supply and sanitation, Shah
- S.C.Rangwala, "Water supply and sanitary engineering", Chartar publishing house, Anand, 1989.

References:

- Design and practical handbook of plumbing, Mohan & Anand
- Plumbing- Design and practice, Deolalikar
- Civil handbook, Khanna
- Building construction details, Banz
- Maintenance of buildings, Panchdhari
- G.M. Fair, J.C. Geyer and D.Okun, "Water and Waste water engineering", Volume II, John Wiley & Sons, Inc. New York, 1968
- Manual on sewerage and sewerage treatment, CPHEEO – Ministry of works and housing, New Delhi, 1980
- Renewable energy, basics and technology, supplement volume on integrated energy systems, Auroville, 1998

STUDY TOUR & OTHER ACADEMIC / PROFESSIONAL ACTIVITIES-I (Evaluation)

Course Code: BID 207

Credit Units: 01

Teaching hours: NIL

Guidelines:

- Students shall visit different sites and parts of Rajasthan covering different aspects.
- The report shall be evaluated and marks shall be added in even semester, for study tour.
- It shall be related to the studies done in History of Interior Design, Art & culture and Interior Design of current & pervious semester.
- Evaluation for all extracurricular activities will be done in this course (for current & pervious semester).

The Layout Guidelines for the Report

- A4 size Paper
- Font: Arial (10 points) or Times New Roman (12 points)
- Line spacing: 1.5
- Top and bottom margins: 1 inch/ 2.5 cm; left and right margins: 1.25 inches/ 3 cm
- The report can be hand written as well
- The report shall be properly bound and submitted individually.

Assessment Scheme:

Continuous Evaluation:

50% (Based on punctuality, regularity of work.)

Final Evaluation:

50% (Based on the Documentation in the file/ presentation/ viva)

Course Objective:

The term environment is used to describe, in the aggregate, all the external forces, influences and conditions, which affect the life, nature, behavior and the growth, development and maturity of living organisms. At present a great number of environment issues, have grown in size and complexity day by day, threatening the survival of mankind on earth. A study of environmental studies is quite essential in all types of environmental sciences, environmental engineering and industrial management. The objective of environmental studies is to enlighten the masses about the importance of the protection and conservation of our environment and control of human activities which has an adverse effect on the environment.

Course Contents:**Module I: The multidisciplinary nature of environmental studies**

Definition, scope and importance
Need for public awareness

Renewable and non-renewable resources:

Natural resources and associated problems; Forest resources: Use and over-exploitation, deforestation, case studies.

Timber extraction, mining, dams and their effects on forests and tribal people.

Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.

Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.

Module II: Natural Resources

Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.

Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources, case studies.

Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.

- Role of an individual in conservation of natural resources.

- Equitable use of resources for sustainable lifestyles.

Module III: Ecosystems

Concept of an ecosystem, Structure and function of an ecosystem

Producers, consumers and decomposers, Energy flow in the ecosystem

Ecological succession, Food chains, food webs and ecological pyramids

Introduction, types, characteristic features, structure and function of the following ecosystem:

- a. Forest ecosystem
- b. Grassland ecosystem
- c. Desert ecosystem
- d. Aquatic ecosystems (ponds, streams, lakes, rivers, ocean estuaries)

Module IV: Biodiversity and its conservation

Introduction – Definition: genetic, species and ecosystem diversity

Biogeographical classification of India

	<p>Value of biodiversity: consumptive use, productive use, social, ethical aesthetic and option values</p> <p>Biodiversity at global, national and local levels</p> <p>India as a mega-diversity nation</p> <p>Hot-spots of biodiversity</p> <p>Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts</p> <p>Endangered and endemic species of India</p> <p>Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity</p>
<p>Module V: Environmental Pollution</p>	<p>Definition, causes, effects and control measures of:</p> <ol style="list-style-type: none"> a. Air pollution b. Water pollution c. Soil pollution d. Marine pollution e. Noise pollution f. Thermal pollution g. Nuclear pollution <p>Solid waste management: Causes, effects and control measures of urban and industrial wastes. Role of an individual in prevention of pollution.</p> <p>Pollution case studies.</p> <p>Disaster management: floods, earthquake, cyclone and landslides.</p>
<p>Module VI: Social Issues and the Environment</p>	<p>From unsustainable to sustainable development</p> <p>Urban problems and related to energy</p> <p>Water conservation, rain water harvesting, watershed management</p> <p>Resettlement and rehabilitation of people; its problems and concerns. Case studies, Environmental ethics: Issues and possible solutions</p> <p>Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.</p> <p>Wasteland reclamation, Consumerism and waste products</p> <p>Environmental Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Issues involved in enforcement of environmental legislation, Public awareness</p>
<p>Module VII: Human Population and the Environment</p>	<p>Population growth, variation among nations</p> <p>Population explosion – Family Welfare Programmes</p> <p>Environment and human health</p> <p>Human Rights, Value Education, HIV / AIDS, Women and Child Welfare</p> <p>Role of Information Technology in Environment and Human Health</p> <p>Case Studies</p>
<p>Module VIII: Field Work</p>	<p>Visit to a local area to document environmental assets-river / forest/ grassland/ hill/ mountain.</p> <p>Visit to a local polluted site – Urban / Rural / Industrial / Agricultural</p> <p>Study of common plants, insects, birds</p> <p>Study of simple ecosystems-pond, river, hill slopes, etc (Field work equal to 5 lecture hours)</p>

Examination Scheme:

Components	CT	HA	S/V/Q	A	EE
Weightage (%)	15	5	5	5	70

Text & References:

- Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
- Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad 380 013, India, Email:mapin@icenet.net (R)
- Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
- Clark R.S., Marine Pollution, Clanderson Press Oxford (TB)
- Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumabai, 1196p
- De A.K., Environmental Chemistry, Wiley Eastern Ltd.
- Down to Earth, Centre for Science and Environment (R)
- Gleick, H.P. 1993. Water in Crisis, Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute Oxford Univ. Press. 473p
- Hawkins R.E., Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R)
- Heywood, V.H & Waston, R.T. 1995. Global Biodiversity Assessment. Cambridge Univ. Press 1140p.
- Jadhav, H & Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.
- Mckinney, M.L. & School, R.M. 1996. Environmental Science Systems & Solutions, Web enhanced edition. 639p.
- Mhaskar A.K., Matter Hazardous, Techno-Science Publication (TB)
- Miller T.G. Jr. Environmental Science, Wadsworth Publishing Co. (TB)
- Odum, E.P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA, 574p
- Rao M N. & Datta, A.K. 1987. Waste Water treatment. Oxford & IBH Publ. Co. Pvt. Ltd. 345p.
- Sharma B.K., 2001. Environmental Chemistry. Geol Publ. House, Meerut
- Survey of the Environment, The Hindu (M)
- Townsend C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science
- Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Compliances and Standards, Vol I and II, Enviro Media (R)
- Trivedi R. K. and P.K. Goel, Introduction to air pollution, Techno-Science Publication (TB)
- Wanger K.D., 1998 Environnemental Management. W.B. Saunders Co. Philadelphia, USA 499p

Course Objective:

The course is intended to give a foundation of English Language. The literary texts are indented to help students to inculcate creative & aesthetic sensitivity and critical faculty through comprehension, appreciation and analysis of the prescribed literary texts. It will also help them to respond form different perspectives.

Course Contents:

Module I: Vocabulary	Use of Dictionary Use of Words: Diminutives, Homonyms & Homophones
Module II: Essentials of Grammar - I	Articles Parts of Speech Tenses
Module III: Essentials of Grammar - II	Sentence Structure Subject -Verb agreement Punctuation
Module IV: Communication	The process and importanc Principles & benefits of Effective Communication
Module V: Spoken English Communication	Speech Drills Pronunciation and accent Stress and Intonation
Module VI: Communication Skills-I	Developing listening skills Developing speaking skills
Module VII: Communication Skills-II	Developing Reading Skills Developing writing Skills
Module VIII: Written English communication	Progression of Thought/ideas Structure of Paragraph Structure of Essays
Module IX: Short Stories	Of Studies, by Francis Bacon Dream Children, by Charles Lamb The Necklace, by Guy de Maupassant A Shadow, by R.K. Narayan Glory at Twilight, Bhabani Bhattacharya
Module X: Poems	All the Worlds a Stage Shakespeare To Autumn Keats O! Captain, My Captain. Walt Whitman Where the Mind is Without Fear Rabindranath Tagore Psalm of Life H.W. Longfellow

Examination Scheme:

Components	A	CT	HA	EE
Weightage (%)	05	15	10	70

Text & References:

- Madhulika Jha, Echoes, Orient Long Man
- Ramon & Prakash, Business Communication, Oxford.
- Sydney Greenbaum Oxford English Grammar, Oxford.
- Successful Communications, Malra Treece (Allyn and Bacon)
- Effective Technical Communication, M. Ashraf Rizvi.

Course Objective:

To enable the students:

- Understand the process of problem solving and creative thinking.
- Facilitation and enhancement of skills required for decision-making.

Course Contents:

Module I: Thinking as a tool for Problem Solving	What is thinking: The Mind/Brain/Behaviour Critical Thinking and Learning: Making Predictions and Reasoning Memory and Critical Thinking Emotions and Critical Thinking Thinking skills
Module II: Hindrances to Problem Solving Process	Perception Expression Emotion Intellect Work environment
Module III: Problem Solving	Recognizing and Defining a problem Analyzing the problem (potential causes) Developing possible alternatives Evaluating Solutions Resolution of problem Implementation Barriers to problem solving: <ul style="list-style-type: none"> - Perception - Expression - Emotion - Intellect - Work environment
Module IV: Plan of Action	Construction of POA Monitoring Reviewing and analyzing the outcome
Module V: Creative Thinking	Definition and meaning of creativity The nature of creative thinking Convergent and Divergent thinking Idea generation and evaluation (Brain Storming) Image generation and evaluation Debating The six-phase model of Creative Thinking: ICEDIP model
Module VI: End-of-Semester Appraisal	Viva based on personal journal Assessment of Behavioural change as a result of training Exit Level Rating by Self and Observer

Examination Scheme:

Components	SAP	A	Mid Term Test (CT)	VIVA	Journal for Success (JOS)
Weightage (%)	20	05	20	30	25

Text & References:

- Michael Steven: How to be a better problem solver, Kogan Page, New Delhi, 1999
- Geoff Petty: How to be better at creativity; Kogan Page, New Delhi, 1999
- Richard Y. Chang and P. Keith, Kelly: Wheeler Publishing, New Delhi, 1998.
- Phil Lowe Koge Page: Creativity and Problem Solving, New Delhi, 1996
- J William Pfeiffer (ed.) Theories and Models in Applied Behavioural Science, Vol 3, Management (1996); Pfeiffer & Company
- Bensley, Alan D.: Critical Thinking in Psychology – A Unified Skills Approach, (1998), Brooks/Cole Publishing Company.

Course Objective:

- To enable the students to overcome the fear of speaking a foreign language and take position as a foreigner speaking French.
- To make them learn the basic rules of French Grammar.

Course Contents:

Module A : pp.38 – 47 : Unité 3 : Objectif 3, 4, 5, 6

Module B: pp. 47 to 75 Unité 4, 5

Contenu lexical: Unité 3: Organiser son temps

1. donner/demander des informations sur un emploi du temps, un horaire SNCF – Imaginer un dialogue
 2. rédiger un message/ une lettre pour ...
 - i) prendre un rendez-vous/ accepter et confirmer/ annuler
 - ii) inviter/accepter/refuser
 3. Faire un programme d'activités
imaginer une conversation téléphonique/un dialogue Propositions- interroger, répondre
-
1. situer un lieu
 2. s'orienter, s'informer sur un itinéraire.
 3. Chercher, décrire un logement
 4. connaître les rythmes de la vie

Unité 5: s'informer

1. demander/donner des informations sur un emploi du temps passé.
2. donner une explication, exprimer le doute ou la certitude.
3. découvrir les relations entre les mots
4. savoir s'informer

2. Adjectifs possessifs/exprimer la possession à l'aide de :
 - i. « de »
 - ii. A+nom/pronom disjoint
3. Conjugaison pronominale – négative, interrogative -

construction à l'infinitif

« il faut... »/ «il ne faut pas... »

5. passé composé
6. Questions directes/indirectes

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- le livre à suivre : Campus: Tome 1

Course Objective:

To enable the students to converse, read and write in the language with the help of the basic rules of grammar, which will later help them to strengthen their language.

To give the students an insight into the culture, geography, political situation and economic opportunities available in Germany. Introduction to Grammar to consolidate the language base learnt in Semester I

Course Contents:

Module I: Everything about Time and Time periods

Time and times of the day.

Weekdays, months, seasons.

Adverbs of time and time related prepositions

Module II: Irregular verbs

Introduction to irregular verbs like to be, and others, to learn the conjugations of the same, (fahren, essen, lessen, schlafen, sprechen und ähnliche).

Module III: Separable verbs

To comprehend the change in meaning that the verbs undergo when used as such

Treatment of such verbs with separable prefixes

Module IV: Reading and comprehension

Reading and deciphering railway schedules/school time table

Usage of separable verbs in the above context

Module V: Accusative case

Accusative case with the relevant articles

Introduction to 2 different kinds of sentences – Nominative and Accusative

Module VI: Accusative personal pronouns

Nominative and accusative in comparison

Emphasizing on the universal applicability of the pronouns to both persons and objects

Module VII: Accusative prepositions

Accusative propositions with their use

Both theoretical and figurative use

Module VIII: Dialogues

Dialogue reading: ‘In the market place’
‘At the Hotel’

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Wolfgang Hieber, Lernziel Deutsch
- Hans-Heinrich Wangler, Sprachkurs Deutsch
- Schulz Griesbach, Deutsche Sprachlehre für Ausländer
- P.L Aneja, Deutsch Interessant- 1, 2 & 3
- Rosa-Maria Dallapiazza et al, Tangram Aktuell A1/1,2
- Braun, Nieder, Schmöe, Deutsch als Fremdsprache 1A, Grundkurs

Course Objective:

To enable students acquire more vocabulary, grammar, Verbal Phrases to understand simple texts and start describing any person or object in Simple Present Tense.

Course Contents:**Module I**

Revision of earlier modules.

Module II

Some more AR/ER/IR verbs. Introduction to root changing and irregular AR/ER/IR ending verbs

Module III

More verbal phrases (eg, Dios Mio, Que lastima etc), adverbs (*bueno/malo, muy, mucho, bastante, poco*).

Simple texts based on grammar and vocabulary done in earlier modules.

Module IV

Possessive pronouns

Module V

Writing/speaking essays like my friend, my house, my school/institution, myself....descriptions of people, objects etc, computer/internet related vocabulary

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Español, En Directo I A
- Español Sin Fronteras

Course Objective:

To enable the students to converse in the language with the help of basic particles and be able to define the situations and people using different adjectives.

Course Contents:

Module I: Verbs

Transitive verbs, intransitive verbs

Module II: More prepositions

More particles, articles and likes and dislikes.

Module III: Terms used for instructions

No parking, no smoking etc.

Module IV: Adverbs

Different adverbial expression.

Module V: Invitations and celebrations

Giving and receiving presents,

Inviting somebody for lunch, dinner, movie and how to accept and refuse in different ways

Module VI: Comprehension's

Short essay on Family, Friend etc.

Module VII: Conversations

Situational conversations like asking the way, At a post office, family

Module VIII: Illness

Going to the doctor, hospital etc.

Learning Outcome

▲ Students can speak the language describing above-mentioned topics.

Methods of Private study /Self help

▲ Handouts, audio-aids, and self-do assignments.

▲ Use of library, visiting and watching movies in Japan and culture center every Friday at 6pm.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

Text:

- Teach yourself Japanese

References:

- Shin Nihongo no kiso 1

Course Objective:

Chinese is a tonal language where each syllable in isolation has its definite tone (flat, falling, rising and rising/falling), and same syllables with different tones mean different things. When you say, “ma” with a third tone, it mean horse and “ma” with the first tone is Mother. The course aims at familiarizing the student with the basic aspects of speaking ability of Mandarin, the language of Mainland China. The course aims at training students in practical skills and nurturing them to interact with a Chinese person.

Course Contents:

Module I	Drills Practice reading aloud Observe Picture and answer the question. Tone practice. Practice using the language both by speaking and by taking notes. Introduction of basic sentence patterns. Measure words. Glad to meet you
Module II	Where do you live? Learning different colors. Tones of “bu” Buying things and how muchit costs? Dialogue on change of Money. More sentence patterns on Days and Weekdays. How to tell time. Saying the units of time in Chinese. Learning to say useful phrases like – 8:00, 11:25, 10:30 P.M. everyday, afternoon, evening, night, morning 3:58, one hour, to begin, to end etc.Morning, Afternoon, Evening, Night.
Module III	Use of words of location like-li, wais hang, xia Furniture – table, chair, bed, bookshelf,.. etc. Description of room, house or hostel room..eg what is placed where and how many things are there in it? Review Lessons – Preview Lessons. Expression ‘yao’, ‘xiang’ and ‘yaoshi’ (if). Days of week, months in a year etc. I am learning Chinese. Is Chinese difficult?
Module IV	Counting from 1-1000 Use of “chang-chang”. Making an Inquiry – What time is it now? Where is the Post Office? Days of the week. Months in a year. Use of Preposition – “zai”, “gen”. Use of interrogative pronoun – “duoshao” and “ji”. “Whose”??? Sweater etc is it? Different Games and going out for exercise in the morning.
Module V	The verb “qu” – Going to the library issuing a book from the library – Going to the cinema hall, buying tickets – Going to the post office, buying stamps – Going to the market to buy things.. etc – Going to the buy clothes Etc. Hobby. I also like swimming. Comprehension and answer questions based on it.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- “Elementary Chinese Reader Part I” Lesson 11-20

INTERIOR DESIGN - II

Course Code: BID 301

Credit Units: 05

End semester exam hours: 06

Course Objective:

The objective of the course is to provide a clear understanding and techniques for designing of interior spaces with different activities and uses, using different materials. It enables the students to understand the visual design in an interior space with color schemes, textures, light, shadow etc. The exercise to be executed in this course enable the students to design small and simple spaces.

Course Contents:

Module I: Measured Drawing

Measuring simple spaces and transferring them into drawings in the form of Plans/ Sections/ Interior Elevations.

Module II : Design problem

Introduction to design problem with the methodology to proceed with the Concept, Case studies and Data Collection through primary and secondary sources, Formulation of concept with client's requirements.

Module III: Design Exercise

Furniture layout design and their inter-relationship in space measured and drawn in Module I.

Module IV: Interior Details

Complete Interior Details for the given space designed in Module III. This shall include visual symphony of lines and patterns in plans and elevations and using color composition, textures, etc.

Module V: Model Making

Model of the designed space showing extension of lines, colors, textures and other necessary details. **Exercises:** At least one major exercises and two minor design/time problems should be given. Simple assignment like Bedroom, Living Room, Study Room, Reception Area, Travel Agent Office, Barber Shop, etc.

Examination Scheme:

Components	A	S1	S2	CT	Viva	EE
Weightage (%)	05	15	20	10	20	30

Text & References:

Text:

- A Visual Dictionary of Architecture, Francis D.K. Ching
- Creative Interiors (Design of Enclosed Space), Shashi Jain
- Graphic Interiors (Space Designed by Graphic Artists), Corina Dean
- Interior design illustrated , Francis D.K. Ching
- (Space Designed by Graphic Artists), Corina Dean
- Architecture: Form, Space and Order, Francis D.K. Ching

References:

- Architectural Graphic standards, Boaz Joseph
- Interior Design Visual, Maureen Mitton 2nd Edition
- 100 Bright Ideas For color, Sue Rose

MATERIALS AND CONSTRUCTION TECHNIQUES - III

Course Code: BID 302

Credit Units: 03

End semester exam hours: 03

Course Objective:

To acquaint the students about floor finishes as a building materials. And to familiarize them with construction details and techniques in interior building works.

Course Contents:

Module I: Introduction to different hard finish flooring materials

- Natural Materials : Types of natural stones and application in flooring.
- Man-Made Materials: Ceramics, Terrazzo, Vitrified Flooring, etc.

Module II: Introduction to semisoft finish materials Wood/

PVC /Cork, its application and fixing /finishing details.

Module III: Introduction to soft floor finishes

Different types of Carpets/ Dari/ Rugs (man-made, machine made rugs and carpets)

Study of quality, material, thickness, properties applications on different surface.

Module IV: Flooring Patterns & Tile Alignment

Different types of flooring patterns, designs and tile alignment in different spaces.

Module V: Fixing Details & Specifications

Specification of floor finishes, fixing details, use of decorative/highlighter tiles other flooring materials. Fixing details and specification of tiles on various floor areas like Bedroom, Living rooms, , bathrooms, kitchen, offices, etc.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Building construction W.B.McKay
- Building construction R Berry
- Building construction Chudley
- Building construction Francis D.K. Ching
- Civil Engineering Handbook, P.N. Khanna
- Structure in Architecture, Salvadori and Heller

ART AND GRAPHICS – III

Course Code: BID 303

Credit Units: 02

Course Objective:

The objective of the course is to give an understanding about the graphics skills used in interior design. The emphasis also should be given on the contemporary arts in India and the works of great artists.

Course Contents:

Module I: Shading and rendering

Perspective view – one point and two point after developing them

Module II: Shades and shadows

Learning to draw Shades and shadows in Perspective with Rendering

Module III: Perspectives

Drawing Free hand perspectives and rendering, Draw the above on computer using different types of software.

Module IV: Collage and murals

Preparation of collage and murals for exterior and interior of buildings. Learning importance of collage for emphasizing the areas in interiors.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- A Visual Dictionary of Architecture, Francis D.K. Ching
- Creative Interiors (Design of Enclosed Space), Shashi Jain
- Interior design illustrated, Francis D.K. Ching
- Home Plumbing (The David & Charles Manual of), Ernest Hall
- House Book (The Complete Guide to Home Design), Terence Conran
- Architecture: Form, Space and Order Francis D.K. Ching

References:

- Window Fashion, Charles T. Randall
- Illustration + Perspectives (In Pantone Colors), Eiji Mitooka
- Elements of Architecture, Meiss Pieree Von

GRAPHIC SKILLS – III

Course Code: BID 304

Credit Units: 03

End Sem. Exam. Hours: 03

Course Objective:

The course is intended to develop the technique of architectural rendering, graphic skills required for effective presentation technique. To introduce computer graphics to students

Course Contents:

Module I: Intro to Computer Graphics and basic application of 2D drafting Software

Introduction to Auto CAD.X-Y co-ordinate system, inputting points, the Auto CAD screen, basic Auto CAD terminology, basic drafting commands. Drawing one & two point perspective views using Autocad.

Module II: Auto Cad (2-D): Modifying commands

Basic commands related to drawing properties “layer control change properties, line-weight control”. Use of Display Commands, editing commands,, construction commands, enquiry commands etc., Hatching & texting in drawing, Working on layout & x-ref etc. Drafting of Plan(s), Elevation(s) and Section(s).

Module III: Perspective drawing using Autocad

Drawing One Point, Two Point and 3 Point Perspective using software like Autocad using fundamentals - Cone of vision, station Points, picture plane, eye level, horizon line, ground line, vanishing point.

Module IV: Auto Cad (2-D): Introduction to use of Sheet Setup

To setting up a drawing environment; setting the paper size setting unit setting grid limit, drawing limit, snap controls. Two-dimensional drafting work to be handled in detail on Auto Cad. Basic Drafting commands (Related to drafting of line to All geometrical shapes).

Module V: Auto Cad (2-D) Printing equipment’s and hardware

Familiarizing the use of printers, plotters their hardware and other related systems. Various Settings & different mode to print Auto CAD drawing. Importing & exporting the drawings from one software into other.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- Architectural Graphics: C. Leslie Martin
- Perspective for the Architect: Themes and Hudson
- Perspective and Sciography, Shankar Mulik
- Mastering AutoCAD: George Omura
- Interior Design: Ahmed Kasu
- Architectural Graphics – Ching Frank
- Engineering Drawing – N.D. Bhatt
- Engineering Drawing – P.S. Gill

References:

- A.J. Metric Handbook, editors, Jan Bilwa and Leslie Fair weather
- Architectural Graphic standards editor – Boaz Joseph
- Neufert’s Architect’s data
- Rendering with pen and ink

HISTORY OF INTERIOR DESIGN – III

Course Code: BID 305
End Sem. Exam. Hours: 03

Credit Units: 02

Course Objective:

The objective of the course is to understand about the trends of interior design development and movements associated with them like Arts & Crafts, Art Deco and emergence of modernism and contemporary interiors of 20th Century and learn the development methods and forces to get a clear view of changing design and ideas. Familiarize with the emergence and necessity of interior design and decoration which resulted in emergence of the profession.

Course Contents:

Module I: Early 19th century and Mid 19th century

Industrial Revolution, Period – Early 19th century. Victorian taste with change, Period – Mid 19th Century

Module I: Late 19th century

The search for a new style, Period – Late 19th Century . Reference to European and American style

Module II: Early 20th Century

Arts & Crafts movement, Art Nouveau, Impressionism Period – Early 20th Century

Module III: Mid 20th Century

Art Deco, Bauhaus Movement and the Modern, Period – Mid 20th Century

Module IV: Late 20th century

The Post – Modern/ contemporary era, Minimalism, Photo Realism Period – Late 20th century
Present universal trends emerging all over world. Overview of prominent works by Frank O Gehry, I .M. Pei, John Urtzon, Norman Foster, Zaha Hadid. Furniture design by prominent architects and designers like Le Corbusier, Charles and Ray Eames, EeroSaarinen, Marcel Breuer

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- History of Interior Design, Jeannie Ireland
- A History of Interior Design, John F Pile
- The History of Arch. in India, Chrictophes Tadjell
- Interior design & space planning, Dechiara Pabero Zelnik
- Interior design illustrated, Francis D.K. Ching

References:

- Islamic Architecture in Interior, Satish Grover
- The Best Interior India, Anuradha Mahindra
- Indian Interior, Angelika Taschen

BUILDING SERVICES – II

(Electrical System & Lighting)

Course Code: BID 306
End semester exam hours: 03

Credit Units: 02

Course Objective:

Integration of electrical system with building design. Application of indoor and outdoor lighting in various planning and installation requirement right from generation to actual building level so that the students could use the same in their design.

Course Contents:

Module I: Introduction to electrical systems

Introduction to electrical engineering services for buildings; Sources of electrical energy supplied to buildings Electricity generation, transmission and distribution. Instruments for measurement, metering; Electricity Authority, Act, rules and regulation regarding electrification of buildings; Standard Graphical symbols for electrical systems; electric fittings and appliances; Requirements of electrical materials such as conductors, insulators; Types and requirements of electrical cables

Module II: Electrical System design for a building

Basic Principles of electrical circuit, Methods of wiring -Open and concealed wiring system, distribution system and supply in a building, distribution board and meter, switches; Electrical load calculation,; Design considerations of electrical installations, Study of Electrical layout in a building.

Module III: Electrical safety and protection system

Protection against overload, short circuit, Control equipment such as switch gear, safety devices to be used in electrical layouts - Fuse, M.C.B, MCCB, ACB, VCB, RCB, ELCB; Earthing and Lightning Protection

Module IV: Photometric concepts and Daylighting

Introduction to basic photometric concept: Light its behaviour and properties, Instruments for measurement lux meters, field of vision, visual task, visual comfort and glare: objectives of lighting design in architecture; Daylighting-Sky illuminance, solar chart and daylight factor, methods for effective daylighting and glare control in interiors.

Module V: Artificial lighting

Type of lamps and luminaries, Outdoor lighting; methods for effective artificial lighting for different interior spaces like art galleries, offices spaces etc. Glare control in artificial lighting; Integration of Electrical lighting with day lighting, Energy conservation in artificial lighting (sensors etc.)

Module VI: Design exercise

Design and developed detailed layout of electrical and lighting services of previous semester design problem.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

1. Raina K. B. & Bhattacharya S. K. (2007) Electrical Design, Estimating and Costing, New Age International Publishers, New Delhi.
2. Dagostino, F. R. (1978) Mechanical and Electrical Systems in Construction in Architecture, Reston Publishing Company, Prentice Hill Co., Virginia.
3. Egan, D. M. (1983) Concepts in Architectural Lighting, McGraw Hill Book Company.
4. Flynn, J. E. et. al (1992) Architectural Interior Systems: Lighting, Acoustics and Air conditioning, Van Nostrand Reinhold
5. NBO (1966) Hand book for Building Engineers, National Buildings Organisation, New Delhi.
6. Grondzik, W. T., Kwok, A.G., Stein, B, Reynolds, J. S. (2009) Mechanical and Electrical Equipment for Buildings, Wiley
7. "Electric Heating",E.P. Ambrose,John Wiley & Sons Inc., New York, 1968.
8. Electrical Technology, Seventh Edition,H. Cotton,CBS publications, 2003
9. Design of Electrical Installations by Er. V.K. Jain and Er. Amitabh Bajaj

FURNITURE DESIGN WORKSHOP – I

Course Code: BID 307
End semester exam hours: 03

Credit Units: 02

Course Objective:

The aim of the course is to make the students aware of the furniture designing which is a important part of interior design. The history of furniture is also to be introduced and described as the part of the course.

Course Contents:

Module I: Ergonomics & Anthropometry

Introduction to Ergonomics of furniture design.

Module II: Furniture design

Furniture design, Analyzing furniture type, form and designing

Module III: Furniture materials

Introduction to furniture design as per different materials and studying ergonomic design to prevent repetitive strain injuries and other musculoskeletal disorders.

Module IV: Parameters

Analyzing working parameters and visual perception of furniture

Module V: Measuring drawing

Measuring drawing of a simple furniture and make it in the workshop, Introduction to various typology of furniture.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- A Visual Dictionary of Architecture, Francis D.K. Ching
- Creative Interiors (Design of Enclosed Space), Shashi Jain
- Interior design illustrated , Francis D.K. Ching
- Home Plumbing (The David & Charles Manual of), Ernest Hall
- House Book (The Complete Guide to Home Design), Terence Conran
- Architecture: Form, Space and Order Francis D.K. Ching

References:

- Window Fashion, Charles T. Randall
- Illustration + Perspectives (In Pantone Colors), Eiji Mitooka
- Elements of Architecture, Meiss Pieree Von

Domain Electives – I

BID 308

COLORS

Course Code: BID 308

Credit Units: 02

Teaching hours: 02

Hours

Course Objective: Learning the use of colours in Architecture. Understanding the impact of colours on human being and making its efficient use in architecture, its component and various products being used in buildings.

Module I: Study of classification of colours with different hues, values, and shades. Colour composition and properties. Colour wheel showing primary, secondary & tertiary colours. Chart showing Tints & tones of various colours, Colour combinations

Module II: Exploring Colour Schemes and its application on Architectural Forms & spaces : Assignment on Colour shall be aimed at developing the skills to create Visually pleasing Colour Schemes based on principles of Harmony and Contrast and degree of Chromatism.

Module III : Colour as an expressive element in architecture emphasize the character of a building and create harmony and unity, or it can be deliberately contrasting to enliven or emphasise. It may affect the way in which people respond to their surroundings and can enhance a mood of calm or elation.

Module IV: Approaches to colour in architecture and design. The use of colour in architecture More Than Just Decoration. Examples of colour uses by masters and making a report.

Module V :Color Psychology , Neuropsychological Aspects, Architectural Environments, Visual Ergonomics and Color. Sociological aspects related to different colours

Exercise: Parallel and angular exterior perspective views of objects of buildings in different colours medium rendered with appropriate colours showing shades and shadows. Effect of colour in relief compositions.

Students may be advised to use colours in interior and exterior rendering of different type shapes in different type shapes in different mediums to have firsthand experience.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

- Architectural Rendering Albert & Habe How to paint & draw Jaxtheimer
- COLOR, Environment, & Human Response by Frank H. Mahnke
- Color-Communication in Architectural Space by Meerwein, Rodeck, Mahnke
- The role of colour in architecture by James A M Bell.

BID 309**VERNACULAR ARCHITECTURE****Course Code: BID 309****Credit Units: 02****Teaching hours: 02 Hours**

Course Objectives: To expose the students to traditional architecture of the various parts of the country. The students will have knowledge of the planning aspects, materials used in construction, constructional details and settlement planning of the settlements in various parts of the country.

Course Contents:**Module I: Introduction to Vernacular Architecture**

Approaches and concepts to the study of Vernacular architecture – Introduction to Kutcha architecture and Pucca architecture and architecture without architects developed through experience based on local material.

Module II: Southern region

Planning aspects, materials of construction, Constructional details & Settlement Planning of:

- Kerala – Nair houses (Tarawads), Kerala Muslim houses (Mappilah houses), Temples, Palaces and theaters – Thattchushastra.
- Tamil Nadu – Toda Huts, Chettinad Houses (Chettiars) & Palaces
- Karnataka – Gutthu houses (land owning community), Kodava ancestral home (Aynmane)
- Andhra Pradesh –Kaccha buildings Religious practices, beliefs, culture & climatic factors influencing the planning of the above.

Module III: Western Region

Planning aspects, Materials used, Constructional details, Climatic factors influencing the planning of

- Jat houses for farming caste, Bhungas(Circular Huts) and Havelis(Pukka houses) of Rajasthan
- Pol houses of Ahmedabad - Primitive forms, Symbolism, Colour, Folk art etc in the architecture of the deserts of Kutch & Gujarat state.
- Vernacular architecture of Goa.

Module IV: Northern and Eastern India

Planning aspects, Materials used, Constructional details, Climatic factors influencing the planning of-

- Kashmir – Typical Kutcha houses, mosque, Dhoongas(Boathouses), Ladakhi houses, bridges
- Himachal Pradesh – Kinnaur houses
- Uttar Pradesh – Domestic housing of Uttar Pradesh
- Bengal – Bangla (Rural house form), Aat Chala houses – change from Bangla to Bungalow, Kutcha & Pucca architecture of Bengal.Nagaland – Naga houses & Naga village, Khasi houses Factors influencing the planning aspects, materials of construction& constructional details of the above.

Module V : overview of vernacular Architecture of neighbouring countries and world such as Africa, UAE etc.

Exercise : students may be advised to prepare case studies through literature/online/ site visits and submit report.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

- Traditional buildings of India, Ilay Cooper, Thames and Hudson Ltd., London
- Architecture of the Indian desert, Kulbushan Jain & Meenakshi Jain, Aadi Centre, Ahmedabad
- The Royal Palaces of India, George Michell, Thames and Hudson Ltd., London
- Chettiar Heritage, S.Muthiah, Meenakshi Meyappan, Visalakshmi RAMASWAMY, Lokavani-Hallmark Press Pvt. Ltd., Chennai
- Encyclopaedia of Vernacular architecture of the World, Cambridge University Press
- Havali – Wooden houses & mansions of Gujarat, V.S.Pramar, Mapin Publishing Pvt. Ltd., Ahmedabad
- The Tradition of Indian architecture – Continuity & Controversy – Change since 1850, G.H.R.Tillotsum, Oxford University Press, Delhi
- VISTARA – The architecture of India, Carmen Kagal. Pub : The Festival of India, 1986.
- House, Form & Culture, Amos Rappoport, Prentice Hall Inc, 1969.

Course Objectives:

To provide technical and structural details of adobe as construction material and fundamentals of buildings with a focus on Adobe bricks.

Student Learning Outcomes:

Students will learn the adobe construction through theoretical and practical instructions, its uses and application in architecture and how it serves green architecture.

Module I: Introduction

History/Origin of adobe , its composition, material properties, its geology, advantages and disadvantages of adobe, adobe around the world and its utilization, relation with other building materials.

Module II: Adobe as a construction material

Types of adobe, Adobe bricks and its making, adobe wall construction and detailing, its applications and uses, adobe as low cost building material and its application in green buildings, conservation & preservation of adobe buildings, overview of basic tools needed for adobe construction,

Module III : Adobe architecture

Overview of adobe architectural style, their pros and cons, making a 2-brick adobe form, Floors & Roofs for adobe construction, Basic overview of plumbing and electrical installation for adobe wall, Interior and exterior plastering of adobe walls.

Module IV: Seminar and Workshop

- Case studies on Adobe architecture and construction across the globe.
 - Hands-on construction experience in adobe structures, learning how to make adobe blocks, laying adobe block, and applying a plaster finish.
 Lectures and presentations on the above given modules for better understanding of the subject.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

- Adobe Conservation by Cornerstone Staff, 2006
- Simone Swan, Adobe Building by Dennis Dollens, 2006
- A complete guide to alternative Home building materials and methods, by Jon Nunan, 2009
- Adobe: Build it yourself, by Paul Graham McHenry
- Building with Earth: Design and Technology of Sustainable Architecture, by Gernot Minke

BCS 301 COMMUNICATION SKILLS - I**Course Code: BCS 301****Credit Units: 01****Teaching hours: 01****Course Objective:**

To form written communication strategies necessary in the workplace

Course Contents:**Module I: Introduction to Writing Skills**

Effective Writing Skills

Avoiding Common Errors

Paragraph Writing

Note Taking

Writing Assignments

Module II: Letter Writing

Types

Formats

Module III

Memo

Agenda and Minutes

Notice and Circulars

Module IV: Report Writing

Purpose and Scope of a Report

Fundamental Principles of Report Writing

Project Report Writing

Summer Internship Reports

Examination Scheme:

Components	CT1	CT2	CAF	V	GD	GP	A
Weightage (%)	20	15	30	10	10	10	5

CAF – Communication Assessment File

GD – Group Discussion

GP – Group Presentation

Text & References:

- Business Communication, Raman – Prakash, Oxford
- Creative English for Communication, Krishnaswamy N, Macmillan
- Textbook of Business Communication, Ramaswami S, Macmillan
- Working in English, Jones, Cambridge
- A Writer's Workbook Fourth edition, Smoke, Cambridge
- Effective Writing, Withrow, Cambridge
- Writing Skills, Coe/Rycroft/Ernest, Cambridge
- Welcome!, Jones, Cambridge

BSS 301 BEHAVIOURAL SCIENCE – III(Interpersonal Communication)

Course Code: BSS 301

Credit Units: 01

Teaching hours: 01

Course Objective:

This course provides practical guidance on Enhancing personal effectiveness and performance through effective interpersonal communication and Enhancing their conflict management and negotiation skills

Course Contents:

Module I: Interpersonal Communication: An

Introduction Importance of Interpersonal Communication

Types – Self and Other Oriented

Rapport Building – NLP, Communication Mode

Steps to improve Interpersonal Communication

Module II: Behavioural Communication Meaning and Nature of behavioural communication Persuasion,

Influence, Listening and Questioning Guidelines for developing Human Communication skills

Relevance of Behavioural Communication for personal and professional development

Module III: Interpersonal Styles

Transactional Analysis

Life Position/Script Analysis

Games Analysis

Interactional and Transactional Styles

Module IV: Conflict Management

Meaning and nature of conflicts

Styles and techniques of conflict management

Conflict management and interpersonal communication

Module V: Negotiation Skills

Meaning and Negotiation approaches (Traditional and Contemporary)

Process and strategies of negotiations

Negotiation and interpersonal communication

Module VI: End-of-Semester Appraisal

Viva based on personal journal

Assessment of Behavioural change as a result of training

Exit Level Rating by Self and Observer

Examination Scheme:

Components	SAP	A	Mid Term Test (CT)	VIVA	Journal for Success (JOS)
Weightage (%)	20	05	20	30	25

Text & References:

- Vangelist L. Anita, Mark N. Knapp, Inter Personal Communication and Human Relationships: Third Edition, Allyn and Bacon
- Julia T. Wood. Interpersonal Communication everyday encounter
- Simons, Christine, Naylor, Belinda: Effective Communication for Managers, 1997 1st Edition Cassel
- Goddard, Ken: Informative Writing, 1995 1st Edition, Cassell
- Harvard Business School, Effective Communication: United States of America
- Foster John, Effective Writing Skills: Volume-7, First Edition 2000, Institute of Public Relations (IPR)
- Beebe, Beebe and Redmond; Interpersonal Communication, 1996; Allyn and Bacon Publishers.

**FOREIGN LANGUAGE 301
FLF 301 FRENCH - III**

Course Code: FLF 301

Credit Units: 02

Teaching hours: 02

Course Objective:

To provide the students with the know-how

- To master the current social communication skills in oral and in written.
- To enrich the formulations, the linguistic tools and vary the sentence construction without repetition.

Course Contents:

Module B: pp. 76 – 88 Unité 6

Module C: pp. 89 to103 Unité 7

Contenu lexical: Unité 6:se faire plaisir

1. acheter : exprimer ses choix, décrire un objet (forme, dimension, poids et matières) payer
2. parler de la nourriture, deux façons d'exprimer la quantité, commander un repas au restaurant
3. parler des différentes occasions de faire la fête

Unité 7: Cultiver des relations

1. maîtriser les actes de la communication sociale courante (Salutations, présentations, invitations, remerciements)
2. annoncer un événement, exprimer un souhait, remercier, s'excuser par écrit.
3. caractériser une personne (aspect physique et caractère)

Contenu grammatical :

1. accord des adjectifs qualificatifs
2. articles partitifs
3. Négations avec de, ne...rien/personne/plus
4. Questions avec combien, quel...
5. expressions de la quantité
 6. ne...plus/toujours - encore
 7. pronoms compléments directs et indirects
8. accord du participe passé (auxiliaire « avoir ») avec l'objet direct
9. Impératif avec un pronom complément direct ou indirect
10. construction avec « que » - Je crois que/ Je pense que/ Je sais que

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	15	20	20	20	5

C – Project +Presentation

I – Interaction/Conversation Practice

Text & References:

- le livre à suivre : Campus: Tome 1

FLG 301 GERMAN - III

Course Code: FLG 301

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable the students to converse, read and write in the language with the help of the basic rules of grammar, which will later help them to strengthen their language. To give the students an insight into the culture, geography, political situation and economic opportunities available in Germany

Course Contents:

Module I: Modal verbs

Modal verbs with conjugations and usage

Imparting the finer nuances of the language

Module II: Information about Germany (ongoing)

Information about Germany in the form of presentations or “Referat”– neighbors, states and capitals, important cities and towns and characteristic features of the same, and also a few other topics related to Germany.

Module III: Dative case

Dative case, comparison with accusative case

Dative case with the relevant articles

Introduction to 3 different kinds of sentences – nominative, accusative and dative

Module IV: Dative personal pronouns

Nominative, accusative and dative pronouns in comparison

Module V: Dative prepositions

Dative preposition with their usage both theoretical and figurative use

Module VI: Dialogues

In the Restaurant,

At the Tourist Information Office,

A telephone conversation

Module VII: Directions

Names of the directions

Asking and telling the directions with the help of a roadmap

Module VIII: Conjunctions

To assimilate the knowledge of the conjunctions learnt indirectly so far

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	15	20	20	20	5

C – Project +Presentation

I – Interaction/Conversation Practice

Text & References:

- Wolfgang Hieber, Lernziel Deutsch
- Hans-Heinrich Wangler, Sprachkurs Deutsch
- Schulz Griesbach, Deutsche Sprachlehre für Ausländer
- P.L Aneja, Deutsch Interessant- 1, 2 & 3
- Rosa-Maria Dallapiazza et al, Tangram Aktuell A1/1,2
- Braun, Nieder, Schmöe, Deutsch als Fremdsprache 1A, Grundkurs

FLS 301 SPANISH – III

Course Code: FLS 301

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable students acquire knowledge of the Set/definite expressions (idiomatic expressions) in Spanish language and to handle some Spanish situations with ease.

Course Contents:

Module I

Revision of earlier semester modules

Set expressions (idiomatic expressions) with the verb *Tener, Poner, Ir*.

Weather

Module II

Introduction to *Gustar*...and all its forms. Revision of *Gustar* and usage of it

Module III

Translation of Spanish-English; English-Spanish. Practice sentences.

How to ask for directions (using *estar*)

Introduction to IR + A + INFINITIVE FORM OF A

VERB Module IV

Simple conversation with help of texts and vocabulary

En el restaurante

En el instituto

En el aeropuerto

Module V

Reflexives

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	15	20	20	20	5

C – Project +Presentation

I – Interaction/Conversation Practice

Text & References:

- Español, En Directo I A
- Español Sin Fronteras -Nivel Elemental

FLJ 301 JAPANESE - III

Course Code: FLJ 301

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable the students to converse in the language with the help of basic verbs and to express themselves effectively and narrate their everyday short encounters. Students are also given projects on Japan and Japanese culture to widen their horizon further.

Note: The Japanese script is introduced in this semester.

Course Contents:

Module I: Verbs

Different forms of verbs: present continuous verbs etc

Module II

More Adverbs and adverbial expressions

Module III: Counters

Learning to count different shaped objects,

Module IV: Tenses

Past tense, Past continuous tense.

Module V: Comparison

Comparative and Superlative degree

Module VI: Wishes and desires

Expressing desire to buy, hold, possess. Usage in negative sentences as well.

Comparative degree, Superlative degree.

Module VII: Appointment

Over phone, formal and informal etc.

Learning Outcome

- ▲ Students can speak the language and can describe themselves and situations effectively
- ▲ They also gain great knowledge in terms of Japanese lifestyle and culture, which help them at the time of placements.

- ▲ Handouts, audio-aids, and self-do assignments.
- ▲ Use of library, visiting and watching movies in Japan and culture center every Friday at 6pm.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	15	20	20	20	5

C – Project +Presentation

I – Interaction/Conversation Practice

Text & References:

Text:

- Teach yourself Japanese

References:

- Shin Nihongo no kiso 1

FLC 301 CHINESE – III

Course Code: FLC 301

Credit Units: 02

Teaching hours: 02

Course Objective:

Foreign words are usually imported by translating the concept into Chinese; the emphasis is on the meaning rather than the sound. But the system runs into a problem because the underlying name of personal name is often obscure so they are almost always transcribed according to their pronunciation alone. The course aims at familiarizing the student with the basic aspects of speaking ability of Mandarin, the language of Mainland China. The course aims at training students in practical skills and nurturing them to interact with a Chinese person.

Course Contents:

Module I	Drills Dialogue practice Observe picture and answer the question. Introduction of written characters. Practice reading aloud Practice using the language both by speaking and by taking notes. Character writing and stroke order
Module II	Measure words Position words e.g. inside, outside, middle, in front, behind, top, bottom, side, left, right, straight. Directional words – beibian, xibian, nanbian, dongbian, zhongjian. Our school and its different building locations. What game do you like? Difference between “hii” and “neng”, “keyi”.
Module III	Changing affirmative sentences to negative ones and vice versa Human body parts. Not feeling well words e.g. ; fever, cold, stomach ache, head ache. Use of the modal particle “le” Making a telephone call Use of “jiu” and “cal” (Grammar portion) Automobiles e.g. Bus, train, boat, car, bike etc. Traveling, by train, by airplane, by bus, on the bike, by boat.. etc.
Module IV	The ordinal number “di” “Mei” the demonstrative pronoun e.g. mei tian, mei nian etc. use of to enter to exit Structural particle “de” (Compliment of degree). Going to the Park. Description about class schedule during a week in school. Grammar use of “li” and “cong”. Comprehension reading followed by questions.
Module V	Persuasion-Please don't smoke. Please speak slowly Praise – This pictorial is very beautiful Opposites e.g. Clean-Dirty, Little-More, Old-New, Young-Old, Easy-Difficult, Boy-Girl, Black-White, Big-Small, Slow-Fast ... etc. Talking about studies and classmates Use of “it doesn't matter” Enquiring about a student, description about study method. Grammar: Negation of a sentence with a verbal predicate.

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	15	20	20	20	5

C – Project +Presentation

I – Interaction/Conversation Practice

Text & References:

- “Elementary Chinese Reader Part I, Part-2” Lesson 21-30

INTERIOR DESIGN - III

Course Code: BID 401

Credit Units: 05

End semester exam hours: 06

Course Objective:

The objective of the course is to provide a clear understanding about the design elements and principles followed while designing interiors of a Residential unit like a house using different materials and architectural styles.

Course Contents:

Module I: Study & Research

Literature and Case studies of existing Residential spaces. Market study of and interior materials and finishes commonly used in Residential designing. Report/Sheet submission containing all the details of the study.

Module II: Furniture Layout

Furniture layout of an existing house/ mono-cellular unit for a built up space of up to 100sqm with all the required services in terms of uses such as electrical, water supply etc. integrating the same with furniture layout and its representation / rendering of required drawings.

Module III: Detailed Drawings

Preparing detailed drawings showing Floor Finish Plan, Reflected Ceiling Plans and Interior Elevations. Preparing a physical model showing the interiors of the House. Preparing a 3D model in Autocad/ Sketch-up

Module IV: Complete Residential Unit

Design the interiors for a House with a floor area of approx. 200sq.m. – 250sq.m. in a two storey structure with an open courtyard on a plot size of minimum 200sqm. Preparing detailed Furniture layout, Floor Finish Plan, Reflected Ceiling Plans and Interior Elevations and rendering of drawings.

Module V: Model Making & Materials listing

Preparing Model of the house showing interiors and other necessary details and preparing a list of materials.

Exercises: At least one major exercises and two minor design/time problems should be given. Assignment like One story House, Salon with Spa, Two Story House/ Villa, Architect's Office, Storage Unit, etc.

Examination Scheme:

Components	A	S1	S2	CT	Viva	EE
Weightage (%)	05	15	20	10	20	30

Text & References:

Text:

- Interior Best Collection, Commerce Asia II, Archiworld
- Interior Design- Ahmed Kasu
- Interior Design Illustrated - Francis D.K. Ching
- Time Saver standards for Interior Designing and Space Planning , Joseph Dechiara and [Julius Panero](#)

References:

- A.J. Metric Handbook, editors, Jan Bilwa and Leslie Fair weather
- Architectural Graphic standards editor, Boaz Joseph
- Planning – the Architect's handbook, E and E.O.
- Neufert's Architect's data

MATERIALS AND CONSTRUCTION TECHNOLOGY - IV

Course Code: BID 402
End semester exam hours: 03

Credit Units: 03

Course Objective:

To familiarize students with different transparent/ translucent materials such as Glass, acrylic Sheets, polycarbonate sheets etc. and construction techniques for use as materials in interior built works. Study of Aluminum as a building material and its application with Glass and other products.

Course Contents:

Module I: Types of Glass

Glass and glass products: Plain, sheet, plate, textured, laminated, wired and toughened glass. Glass blocks, glass tiles, mirrors, heat reflecting glasses and Glass wool.

Module II: Glazing/ Glass Partitions/ Floor/ Ceiling

Introduction to the basics of Curtain Wall Glazing and Structural Glazing. Use of Glass Partitions, Glass floors, Glazed surfaces, etc in interiors. Market survey of available materials, technology and hardware and understanding construction details.

Module III: Glazed Aluminum/Steel Doors, Windows & Partitions

Construction and fixing details used for glazed aluminum doors, windows, partitions, their applications, types, pricing. Steel doors and window: types and construction detail, standard door/windows sections. Types of Rolling Shutters and their construction detail. Market survey of available technology and products.

Module IV: Acrylic and Polycarbonate

Transparent and translucent sheets like Acrylic, polycarbonate sheets in interiors. Understanding the use and application of Translight in interiors and working drawings.

Module V: Elevators, Escalators and Staircase

Elevators types- Conventional, Glass Elevators for Residence application , etc. and basic construction details. Escalators: Types and Construction detail, Travelators and other modern modes of movement. Construction details of Steel Staircase, Glass Staircase with SS handrail, Glass balustrade and other details.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Building construction W.B. McKay
- Building construction R Berry
- Building construction Chudley
- Building construction Francis D.K. Ching
- Structure in Architecture, Salvadori and Heller.

ART AND GRAPHICS – IV

Course Code: BID 403
End Sem. Exam. Hours: 03

Credit Units: 02

Course Objective:

The objective of the course is to learn about interior surface designing, independent standing three dimensional artwork which could be used in exhibition spaces, lobby, lounge spaces and semi-public and private spaces.. Making models to present your ideas.

Course Contents:

Module I: Introduction

Use of various raw materials/ finish materials/ waste materials to make sculptures, installations with advanced technology and discovering and developing new techniques of designing. Understanding scale, proportions, textures, etc of various three dimensional art forms.

Module II: Installation

Composition of an Installation from waste materials to create an functional model applying various textures and finishes. The installation should be able to stand independently without additional supports.

Module III: Sculpture

Making of small size sculptures using different materials with a given theme and understanding the method for making it. Application of colors, textures, polish, etc. to the sculpture as required.

Module IV: Geometrical and Organic Shape 3d- Models

Designing of models based on Geometrical and Organic shapes with given themes which could be put to different uses or just serve an aesthetic function.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- A Visual Dictionary of Architecture, Francis D.K. Ching
- Creative Interiors (Design of Enclosed Space), Shashi Jain
- Interior design illustrated, Francis D.K. Ching
- Home Plumbing (The David & Charles Manual of), Ernest Hall
- House Book (The Complete Guide to Home Design), Terence Conran
- Architecture: Form, Space and Order Francis D.K. Ching

References:

- Window Fashion, Charles T. Randall
- Illustration + Perspectives (In Pantone Colors), Eiji Mitooka
- Elements of Architecture, Meiss Pieree Von

GRAPHIC SKILLS – IV

Course Code: BID 404

Credit Units: 03

End Sem. Exam. Hours: 03

Course Objective:

To train students in drafting and presentation techniques using computer software.

Course Contents:

Module I: Auto Cad (2-D): Advanced commands

Draw, edit and create a complete set of architectural drawings for a dwelling unit using AutoCad Plan(s), Elevation(s) and Section(s) in detail. Create final set of 2D drawings in AutoCad.

Module II: Use of photo editing Software

Photo editing as well as preparation of 2-D presentations and rendering views on Photoshop/ Corel Draw. Create final presentation 2D drawings in Photoshop or Corel Draw.

Module III: Introduction to (3-D) software (Elementary-I)

Introduction to basic 3-D software of architectural significance AutoCAD-3D and its basic usage (creating conceptual exterior and views of an Architectural Project).

Module IV: Introduction to (3-D) software (Elementary-II)

Introduction to Sketch Up. Creating basic Interior views of a 3D project using SketchUp.

Module V: Advanced Modeling & Basic Rendering

Advanced 3D Modeling in Autocad and Sketch Up with Human figures, furniture layout, Wall and floor finishes using Material library, interior landscape, doors and windows and other details. Creating basic rendered views using Autocad, Sketch Up and Photoshop.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Manuals of Autocad – Autodesk Inc.
- Computer graphics and design, Radhakrishnan
- Inside Autocad--parker,denial& rice
- Google SketchUp user's guide.
- Adobe Photoshop user guide/manual.
- Google SketchUp for Interior Designers – Daniel John Stine
- Rendering in SketchUp – Daniel Tal
- V-ray user's Guide.
- Lumion user's guide/manual.
- Architectural Design with SketchUp – Alexander Schreyer

FURNITURE DESIGN – II

Course Code: BID 405

Credit Units: 02

End Sem. Exam. Hours: 03

Course Objective:

The objective of the course is to provide knowledge about an existing piece of furniture in its functional and technical aspect, carpentry skills required, materials and properties, biomechanical factors, ergonomics, aesthetics and economical factors.

Course Contents:

Module I: Analyzing furniture

Analyzing furniture forms and designing furniture forms scientifically based on ergonomics, material design and working parameters and visual perception of furniture as a single form and as a system in a given interior space.

Module II: Measurement drawing

Measurement drawing of a piece of a furniture- plan, elevation, sections and detail drawings on proper scale. Design of a simple object having some moving components like a folding stool or chair. History of furniture from early days to industrial revolution.

Module III: Modular Aspect

Modular aspect and approach towards all types of furniture, cost criteria of design furniture for lower income group in the society.

Module IV: Furniture Style

Design and understand Post Independence furniture style.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- A Visual Dictionary of Architecture, Francis D.K. Ching
- Creative Interiors (Design of Enclosed Space), Shashi Jain
- Interior design illustrated , Francis D.K. Ching
- Home Plumbing (The David & Charles Manual of), Ernest Hall
- House Book (The Complete Guide to Home Design), Terence Conran
- Architecture: Form, Space and Order Francis D.K. Ching

References:

- Window Fashion, Charles T. Randall
- Illustration + Perspectives (In Pantone Colors), Eiji Mitooka
- Elements of Architecture, Meiss Pieree Von

BUILDING SERVICES – III

(Acoustical system)

Course Code: BID 406
End semester exam hours: 03

Credit Units: 02

Course Objective:

To acquaint students about acoustical requirements and consideration for building design right from residential to the theatre type of building.

Course Contents:

Module I: Terminology in Acoustics

Sound and its properties, audible sound, intensity and loudness, frequency and pitch, quality Reflection, absorption, transmission, diffusion, diffraction of sound ; Common acoustical defects: Echo, sound-foci, dead spots, sound shadows, resonance, insufficient loudness, external noise, reverberation and reverberation time

Module II: Acoustic materials

Sound absorbing materials and their applications– description and characteristics, types of absorbers and reflectors and their application, Market survey and sample collection.

Module III: Acoustical design case studies

Study of existing designs to understand shapes/spaces and integration of acoustical equipment in the design.

Module IV: Noise control

Environmental noise control: noise sources, airborne and structure-borne noise, transmission of noise, methods of environmental noise control, control of mechanical noise and vibrations, General idea of sound insulation. Noise control in specific types of buildings like – auditoriums, residential buildings, hotels, school, hospitals, offices, libraries

Module V: Design exercise

Acoustical design or case study of existing building such as auditorium, recording studio, theatre, cinema halls, hospitals or a multistory office building.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Templeton, Duncan & Saunders, David, "Acoustic Design", The Architectural Press, London, 1987.
- Templeton (ed.), "Acoustics in the Built Environment", Butterworth, London, 1993.
- NBC of India
- K.A.Siraskar-Acoustics in building design
- Building Construction - B.C. Punmia
- Building Construction - Rangawalla
- Building Construction and Materials – Gurcharan Singh
- Architectural Acoustics: E. David
- An Introduction to Building Physics: Narsmhan
- Fundamentals of acoustic by Kinsler, Lawrence E and others
- Environmental acoustic by Doelle, Leslie L.
- Knudson and Harris, 'Acoustical Designing to Architecture'.
- David Egan, 'Architectural Acoustics' Ross publishers, 2008.
- Ducan Templeton et all 'Acoustics in the Built Environment, Architectural press1997

STUDY TOUR & OTHER ACADEMIC / PROFESSIONAL ACTIVITIES-II (Evaluation)

Course Code: BID 407

Credit Units: 01

Teaching hours: NIL

Guidelines:

- Students shall visit different sites and parts of Rajasthan covering different aspects.
- The report shall be evaluated and marks shall be added in even semester, for study tour.
- It shall be related to the studies done in History of Interior Design, Art & culture and Interior Design of current & pervious semester.
- Evaluation for all extracurricular activities will be done in this course (for current & pervious semester).

The Layout Guidelines for the Report

- A4 size Paper
- Font: Arial (10 points) or Times New Roman (12 points)
- Line spacing: 1.5
- Top and bottom margins: 1 inch/ 2.5 cm; left and right margins: 1.25 inches/ 3 cm
- The report can be hand written as well
- The report shall be properly bound and submitted individually.

Assessment Scheme:

Continuous Evaluation:

50% (Based on punctuality, regularity of work.)

Final Evaluation:

50% (Based on the Documentation in the file/ presentation/ viva)

Course Objective:

To familiarize the students with sustainable building material bamboo and its application in present technological change. The student shall learn the use of Bamboo for various kind of construction and application.

Course Contents:

Module I: Introduction to Bamboo as a Material

Introduction to bamboo and its different types and properties. General uses of Bamboo. Discussing bamboo growth and forms. Studying about bamboo as a material since history and its application being a versatile and fibrous material. Botanical Classification, Types based on Geographical distribution, climatic and soil conditions. Difference between Bamboo, Cane and Reed. Comparison of bamboo with wood. Harvesting, Storage and Drying of Bamboo. Active and Passive methods of Bamboo Preservation and Treatment. Working with Bamboo. Cutting, Sawing and Scorch Drilling of Bamboo. Types of Joints in Bamboo Construction. Shaping and Bending of Bamboo. Treatment of Bamboo Surface using Bleaching and Dyeing methods.

Module II: Bamboo as a Construction material.

Studying the grading of bamboo and its selection and size of bamboo for structure. The different traditional tools used for construction with their application. All the joinery in the structure based on types of lashing and types of shear keys.

Bamboo Reinforced Foundation. Bamboo Flooring. Bamboo Trusses & Roof Skeleton. Bamboo Shingles. Bamboo Walls. Bamboo Doors & Windows. Bamboo Furniture. Bamboo as a Scaffolding material. Bamboo Footbridges and Bridges. Reed Boards & Bamboo Ply. Construction details in Bamboo. Types of Binding, Joints & Connections. Various steps involved-required sizes of members-methods of joining bamboo for various applications.

Module III: Building System & Component

Studying bamboo treatment for longer life of shelter. Analyzing the consideration for site selection. Detailing the construction of bamboo substructure and superstructure plus covering envelop with reference to latest technology.

Module IV: Bamboo products

Bamboo products such as Mats (Chatai), laminates, furniture, flooring, lampshades, furniture etc.

Module V: Live Exercise of Documentation, Workshop & Site Visit

Designing a bamboo structure residential/institutional/recreational etc. based on new technologies and innovations in the field. Case study of Bamboo Houses and Buildings. Site visit to Built environments that have used Bamboo as a Construction material especially in Assam, Meghalaya, Auroville and Kerala.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

Text:

- The Book of Bamboo by David Farrelly
- Building with Bamboo: A Handbook by Jules J.A. Jansen
- *Bamboo Style* by Gale Beth Goldberg

References:

- Bamboo by Susanne Lucas
- Bamboo Architecture & Design (59 Case Studies) by Eduard Broto
- New Bamboo: Architecture and Design by Marcelo Villegas

BID 409 INTERIOR DOCUMENTATION Course

Code: BID 409 Credit Units: 02

Teaching hours: 02

Course Objective:

To familiarize the students with various aspects, issues and considerations related to the documentation of architecture and its characteristics so that its heritage and inherent values can be identified and recorded.

Course Contents:

Module I: Introduction to Architectural Documentation

Introduction to documentation of historical buildings includes not only measured photographic survey, but also surveying of the qualities of building spaces and their elements. Identification and understanding the use and purpose of the documentation.

Module II: Methodology

Detailing the purpose, scaled drawings, photographic documentation, visual analysis, classification and mapping of the spaces and their elements. The originality of these spaces and elements are evaluated within the frame of research results that are previously published, site surveys made. Use of modern equipment such as 'CANVAS' and its interface with I-pad and AutoCAD etc to be understood.

Module III: Analysis

Visual analysis consisting of analysis of spatial element and architectural elements need to be understood. The spaces grouped according to their functions and the elements grouped according to their types. Visual analysis of onsite elements, outside elements need to be recorded. The context of the building need to be understood and recorded.

Module IV: Evaluation of characteristics

Distinguishing the modern with traditional architecture in terms of elements, details etc. Sketching and tabulating the spatial characteristics and their types

Module V: Compilation and Assessment

Classification and comparison is an effective way to decipher architectural characteristics of a historical

Building with its originalities and alterations. The compilation should be as realistic as possible without the opinion of the compiler to retain the authenticity of the project.

NOTE-Students may be assigned a case study to assess the understanding of the subject.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

References:

- Glenn E. Wiggins, Manual of Construction Documentation: An Illustrated Guide to Preparing Construction Drawings, 1989, Whitney Library of Design
- John H. Stubbs, Robert G. Thomson, Architectural Conservation in Asia: National Experiences and Practice
- Wiley, Landscape Architecture Documentation Standards: Principles, Guidelines, and Best practices, 2016, John wiley & sons inc.
- Architectural Heritage, New Technologies in Documentation: Council of Europe, 1990

BID 410 BARRIER FREE ARCHITECTURE (ENABLE DESIGN)

Course Code: BID 410

Credit Units: 02

Teaching hours: 02

Course Objectives: The objective of course is to learn the principles of barrier free design and concepts of universal design. It Provides an idea about barrier free construction principles in buildings while understanding of the key aspects and systems of specially able persons built space in architecture.

Course Contents

Module I: Special Abilities

Understanding the different human imparities such as visual, mobility and hearing and also understanding the abilities of such differently able persons. To understand the architectural requirements of such persons.

Module II: Introduction to Architecture for specially able

Defining the basic concepts of barrier free design, need for barrier free concepts in architecture, concepts of universal design and types of disabilities. Design principles for barrier free architecture and accessibility for all.

Module III: Barrier free elements for outdoors and Urban Design

Design elements outside the building like curb ramps, pedestrian crossing, public toilets, and parking, signage, flooring and street furniture. Case examples of Barrier free architecture in India and across the globe. To study the anthropometrics and dimensions of mobility devices, special fixtures for barrier free design. Barrier free construction materials and dimensions for flooring, walls, doors, windows, staircases, elevators, toilets, entrances and corridors.

Module IV: Laws

Knowledge of different laws prevailing within India and in other countries. Understanding implication of different laws on design of spaces.

Module V: Case Study, Presentation & Design elements

Barrier free architecture in Public Buildings – dimensions and standards. Case Study of Barrier free elements in Public buildings, Photographic documentation and Presentation. Incorporation of barrier free elements in project being pursued in architectural design.

Examination Scheme:

Components	A	CE	CT	EE
Weightage (%)	05	25	20	50

Text & References:

- Guidelines and Space Standards for Barrier Free Built Environment for Disabled and Elderly Persons – Central Public Works Department, Ministry of Urban Affairs & Employment, India, 1998
- IS – 4963 (1987), Recommendations for buildings and facilities for Physically Handicapped
- Barrier-Free Design: Principles Planning, Examples, by [Oliver Heiss, Christine Degenhardt, Johann Ebe](#) (Birkhauser Architecture, 2010)

BCS 401 COMMUNICATION SKILLS – II Course

Code: BCS 401 Credit Units: 01

Teaching hours: 01

Course Objective:

To teach the participants strategies for improving academic reading and writing. Emphasis is placed on increasing fluency, deepening vocabulary, and refining academic language proficiency.

Course Contents:

Module I: Social Communication Skills

Small Talk

Conversational English

Appropriateness

Building rapport

Module II: Context Based Speaking

In general situations

In specific professional situations

Discussion and associated vocabulary

Simulations/Role Play

Module III: Professional Skills

Presentations

Negotiations

Meetings

Telephony Skills

Examination Scheme:

Components	CT1	CT2	CAF	V	GD	GP	A
Weightage (%)	20	20	25	10	10	10	5

CAF – Communication Assessment File

GD – Group Discussion

GP – Group Presentation

Text & References:

- Essential Telephoning in English, Garside/Garside, Cambridge
- Working in English, Jones, Cambridge
- Business Communication, Raman – Prakash, Oxford
- Speaking Personally, Porter-Ladousse, Cambridge
- Speaking Effectively, Jermy Comfort, et.al, Cambridge
- Business Communication, Raman – Prakash, Oxford

Course Code: BSS 401**Credit Units: 01****Teaching hours: 01****Course Objective:**

- To understand the basis of interpersonal relationship
- To understand various communication style
- To learn the strategies for effective interpersonal relationship

Course Contents:**Module I: Understanding Relationships**

Importance of relationships

Role and relationships

Maintaining healthy relationships

Module II: Bridging Individual Differences

Understanding individual differences

Bridging differences in Interpersonal Relationship – TA

Communication Styles

Module III: Interpersonal Relationship Development

Importance of Interpersonal Relationships

Interpersonal Relationships Skills

Types of Interpersonal Relationships

Module IV: Theories of Interpersonal Relationships

Theories: Social Exchange, Uncertainty Reduction Theory

Factors Affecting Interpersonal Relationships

Improving Interpersonal Relationships

Module V: Impression Management

Meaning & Components of Impression Management

Impression Management Techniques

Impression Management Training-Self help and Formal approaches

Module VI: End-of-Semester Appraisal

Viva based on personal journal

Assessment of Behavioural change as a result of training

Exit Level Rating by Self and Observer

Examination Scheme:

Components	SAP	A	Mid Term Test (CT)	VIVA	Journal for Success (JOS)
Weightage (%)	20	05	20	30	25

Text & References:

- Vangelist L. Anita, Mark N. Knapp, Inter Personal Communication and Human Relationships: Third Edition, Allyn and Bacon
- Julia T. Wood. Interpersonal Communication everyday encounter
- Simons, Christine, Naylor, Belinda: Effective Communication for Managers, 1997 1st Edition Cassell
- Goddard, Ken: Informative Writing, 1995 1st Edition, Cassell
- Harvard Business School, Effective Communication: United States of America
- Foster John, Effective Writing Skills: Volume-7, First Edition 2000, Institute of Public Relations (IPR)
- Beebe, Beebe and Redmond; Interpersonal Communication, 1996; Allyn and Bacon Publishers.

**FOREIGN LANGUAGE 401
FLF 401 FRENCH - IV**

Course Code: FLF 401

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable students:

- To develop strategies of comprehension of texts of different origin
- To present facts, projects, plans with precision

Course Contents:

Module C: pp. 104 – 139 : Unités 8,9

Contenu lexical :Unité 8 : Découvrir le passé

1. parler du passé, des habitudes et des changements.
2. parler de la famille, raconter une suite d'événements/préciser leur date et leur durée.
3. connaître quelques moments de l'histoire

Unité 9: Entreprendre

1. faire un projet de la réalisation: (exprimer un besoin, préciser les étapes d'une réalisation)
2. parler d'une entreprise
3. parler du futur

Contenu grammatical:

1. Imparfait
2. Pronom « en »
3. Futur
4. Discours rapporté au présent
5. Passé récent
6. Présent progressif

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- le livre à suivre: Campus: Tome 1

FLG 401 GERMAN - IV

Course Code: FLG 401

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable the students to converse, read and write in the language with the help of the basic rules of grammar, which will later help them to strengthen their language.

To give the students an insight into the culture, geography, political situation and economic opportunities available in Germany. Introduction to Advanced Grammar Language and Professional Jargon

Course Contents:

Module I: Present perfect tense	Present perfect tense, usage and applicability Usage of this tense to indicate near past Universal applicability of this tense in German
Module II: Letter writing	To acquaint the students with the form of writing informal letters.
Module III: Interchanging prepositions	Usage of prepositions with both accusative and dative cases Usage of verbs fixed with prepositions Emphasizing on the action and position factor
Module IV: Past tense	Introduction to simple past tense Learning the verb forms in past tense Making a list of all verbs in the past tense and the participle forms
Module V: Reading a Fairy Tale	Comprehension and narration <ul style="list-style-type: none">▪ Rotkäppchen▪ Froschprinzessin▪ Die Fremdsprache
Module VI: Genitive case	Genitive case – Explain the concept of possession in genitive Mentioning the structure of weak nouns
Module VII: Genitive prepositions	Discuss the genitive prepositions and their usage: (während, wegen, statt, trotz)
Module VIII: Picture Description	Firstly recognize the persons or things in the picture and identify the situation depicted in the picture; Secondly answer questions of general meaning in context to the picture and also talk about the personal experiences which come to your mind upon seeing the picture.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Wolfgang Hieber, Lernziel Deutsch
- Hans-Heinrich Wangler, Sprachkurs Deutsch
- Schulz Griesbach, Deutsche Sprachlehre für Ausländer
- P.L Aneja, Deutsch Interessant- 1, 2 & 3
- Rosa-Maria Dallapiazza et al, Tangram Aktuell A1/1,2
- Braun, Nieder, Schmöe, Deutsch als Fremdsprache 1A, Grundkurs

FLS 401 SPANISH - IV

Course Code: FLS 401

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable students acquire working knowledge of the language; to give them vocabulary, grammar, voice modulations/intonations to handle everyday Spanish situations with ease.

Course Contents:

Module I

Revision of earlier semester modules
Introduction to Present Continuous Tense (Gerunds)

Module II

Translation with Present Continuous Tense
Introduction to Gustar, Parecer, Apetecer, doler

Module III

Imperatives (positive and negative commands of regular verbs)

Module IV

Commercial/business vocabulary

Module V

Simple conversation with help of texts and vocabulary
En la recepcion del hotel
En el restaurante
En la agencia de viajes
En la tienda/supermercado

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Español Sin Fronteras (Nivel – Elemental)

FLJ 401 JAPANESE - IV

Course Code: FLJ 401

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable the students to comfortably interact using basic Japanese.

Note: Teaching is done in roman as well as Japanese script, students will be taught katankana (another form of script) in this semester i.e. to be able to write all the foreign words in Japanese.

Course Contents:

Module I

Comparison using adjectives, making requests

Module II

Seeking permission

Module III

Practice of conversations on:

Visiting people, Party, Meetings, after work, at a ticket vending machine etc

Module IV

Essays, writing formal letters

Learning Outcome

▲ Students can speak the language describing above-mentioned topics.

Methods of Private study /Self help

▲ Handouts, audio-aids, and self-do assignments, role-plays.

▲ Students are also encouraged to attend Japanese film festival and other such fairs and workshops organized in the capital from time to time.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

Text:

- Teach yourself Japanese

References:

- Shin Nihongo no kiso 1

FLC 401 CHINESE – IV

Course Code: FLF 401

Credit Units: 02

Teaching hours: 02

Course Objective:

How many characters are there? The early Qing dynasty dictionary included nearly 50,000 characters the vast majority of which were rare accumulated characters over the centuries. An educate person in China can probably recognize around 6000 characters. The course aims at familiarizing the student with the basic aspects of speaking ability of Mandarin, the language of Mainland China. The course aims at training students in practical skills and nurturing them to interact with a Chinese person.

Course Contents:

Module I	Dialogue Practice Observe picture and answer the question Pronunciation and intonation Character writing and stroke order. Electronic items
Module II	Traveling – The Scenery is very beautiful Weather and climate Grammar question with – “bu shi Ma?” The construction “yao ... le” (Used to indicate that an action is going to take place) Time words “yiqian”, “yiwai” (Before and after). The adverb “geng”.
Module III	Going to a friend house for a visit meeting his family and talking about their customs. Fallen sick and going to the Doctor, the doctor examines, takes temperature and writes prescription. Aspect particle “guo” shows that an action has happened some time in the past. Progressive aspect of an actin “zhengzai” Also the use if “zhe” with it. To welcome someone and to see off someone I cant go the airport to see you off... etc.
Module IV	Shipment. Is this the place to checking luggage? Basic dialogue on – Where do u work? Basic dialogue on – This is my address Basic dialogue on – I understand Chinese Basic dialogue on – What job do u do? Basic dialogue on – What time is it now?
Module V	Basic dialogue on – What day (date) is it today? Basic dialogue on – What is the weather like here. Basic dialogue on – Do u like Chinese food? Basic dialogue on – I am planning to go to China.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- “Elementary Chinese Reader, Part-2” Lesson 31-38

INTERIOR DESIGN - IV

Course Code: BID 501

Credit Units: 05

End semester exam hours: 06

Course Objective:

The objective of the course is to introduce the students to basics of Hospitality spaces. The course should involve different design ideas and schemes to represent the designing of Food joints, cafeterias, restaurants as these are the prime area of designing emerging in the modern world.

Course Contents:

Module I: Introduction to Hospitality Space Design

Introduction to Hospitality Space Design, application of Anthropometrical data, Literature and Case studies of existing projects. Market Study of and interior materials and finishes, lighting fixture, etc. A report needs to be submitted.

Module II: Transformation of Small Spaces

Designing an Eatery/Coffee kiosk in a Commercial based setting or plaza area which requires a small Kitchen and Pantry to function. It could be part of the Food Court or an independent kiosk in a Shopping Mall. Furniture Plan, Elevations, Sections and Detailed Furniture Design showing materials and finishes.

Module III: Theme based Hospitality Space Design

Designing of a space for Cafeteria/Restaurant which will include Dining Area, Kitchen & Pantry, Storage Spaces and provision for a small in-house Bakery. The project will have an estimated area of 300-400sq.m.. Detailed Furniture layout, Floor Finish Plan, Reflected Ceiling Plans and Interior Elevations 3d-representation of the complete interior space.

Module IV: Model & Material Boards

Preparing a Model of a major project showing interiors in detail. Preparing Material Board using actual samples and images.

Module V: Estimate Preparation

Preparing a lump sum/ tentative estimate for furniture, materials and finishes for one of the minor projects. Understanding quantity estimation and calculation. Market comparison of prices for different brands.

Exercises: At least one major exercises and two minor design/time problems should be given. Food Truck, Industrial or Production Unit, BPO, Artist Residence, Professional Office, Toll Booth Interior, Jewellery showroom, etc..

Examination Scheme:

Components	A	S1	S2	CT	Viva	EE
Weightage (%)	05	15	20	10	20	30

Text & References:

Text:

- Design Fundamental in Architecture, Walter Gropius
- Interior Best Collection, Commerce Asia II, Archiworld
- Interior Design- Ahmed Kasu
- Interior Design Illustrated - Francis D.K. Ching
- Time Saver standards for Interior Designing and Space Planning , Joseph Dechiara and [Julius Panero](#)

References:

- A.J. Metric Handbook, editors, Jan Bilwa and Leslie Fair weather
- Architectural Graphic standards editor, Boaz Joseph
- Time Saver standards for building types, editor Joseph D.C. and John Callender.

MATERIALS & CONSTRUCTION TECHNIQUES – V

Course Code: BID 502

Credit Units: 03

End semester exam hours: 03

Course Objective:

To familiarize student with different finishing materials for false ceiling, cladding, upholstery and their use in building works.

Course Contents:

Module I: False ceiling type and Construction details

POP, Gypsum board, Acoustic panels, Wood, Metal etc.- Classification, Manufacturing, Market availability and prices, Advantages/ Disadvantages, Design and detailing etc.

Module II: Exterior and interior finishes

Latest finishing materials and their applications in construction- Aluminum Composite Panels (ACP), PVC Sheets, Gypsum, Fiberglass, Glass bricks, other cladding materials and finishes.

Module III: Paints, Polish, Varnishes and Application Techniques

Types of Paints used in Interiors and exteriors and application methods. Preparation of different surfaces for Painting, Polishing and Varnishing and their market study.

Module IV: Upholstery & Curtains, Drapes & Blinds

Upholstery work in furniture, especially seats, with padding, springs, webbing, and fabric or leather, leatherette covers, etc. Curtains, Drapes, Blinds, their material types and application on doors and windows.

Module V: Special Details

Sliding door and Windows, Folding door, Revolving Door, Sliding and Folding door with hardware and their combinations.

Exercises: Field trips, market survey of available materials, technology and hardware, preparation of study reports and presentation of seminars, preparation of drawings on above topics.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Building construction W.B.McKay
- Building construction R Berry
- Building construction Chudley
- Building construction Francis D.K. Ching

ESTIMATION & SPECIFICATION

Course Code: BID 503

Credit Units: 02

Teaching hours: 02

Course Objective:

To familiarize the students with the theory and practice of estimation and specification.

To develop the understanding of specification writing

Course Contents:

SPECIFICATION

Module I: Introduction

Definition, importance and uses of specification – principles and practice; method of writing specification; form and sequence of clauses, calculation of length according to long & short wall method, center line method.

Module II: Material Specifications

Writing detailed specification for various common building materials e.g., bricks, sand, lime, timber, wood products, glass, paints etc.; specification of new building materials.

Module III: Specification of simple construction

Writing detailed specification for various building construction works

Module IV : BIS Standards

Specification of BIS and other institutions; general Abbreviations used in specifications.

ESTIMATION

Module V: Introduction

Introduction to cost estimation and definitions of terms related to estimates

Module VI: Types of estimates

Types of estimates, abstract and detailed estimates; detail estimates – methods of estimating; taking out of various items; preparation of bill of quantities – use of schedule of rates; analysis of rate and break up of material requirements

Module VII: Cost accountancy and book keeping

Introduction to cost accountancy and book keeping

Module VIII: Rate Analysis

Principles of analysis of rates, rates of labour and materials, rate analysis in different building works.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- Estimating and Costing in Civil Engineering: B. N. Dutta
- Estimation, Costing & valuation by M. Chakraborty.
- Handbook on Building Economics and Productivity, Central Building Research Institute, Roorkee: S.C. Singh and G.C. Sofat

References:

- Civil Engineering Handbook – P.N. Khanna
- R.C.C. Design – Khurmi, Punmia, Sushil Kumar

GRAPHIC SKILLS – V

Course Code: BID 504

Credit Units: 03

End Sem. Exam. Hours: 03

Course Objective:

To train students in drafting and presentation techniques using computer software.

Course Contents:

Module I: Introduction to other 3D Modeling software

Introduction to 3ds Max and learning basic modeling like extrusion of Walls, creating doors and windows, making staircases, etc.

Module II: Intermediate & Advanced Modeling in 3ds Max

Advanced Modeling in 3ds Max using Material library, Lighting Systems in 3ds max. Understanding Scanline and Mental ray rendering.

Module III: Advanced Rendering

Introduction to latest software of architectural significance viz. 3ds Max, V-Ray and Lumion and its basic usage. Creating a complete set of 3d-interior drawings for a dwelling unit. The students shall also render the complete drawings.

Module IV: Basic & Intermediate level Animation

Creating animation (walkthrough) of 3D models using SketchUp, 3ds max, V-Ray and Lumion.

Module V: Learning latest Building Information Modeling (BIM) soft ware's (Revit-Elementary)

Introduction to latest software of architectural significance viz. Revit and its basic usage for. Creating Plan(s), Elevation(s) and Section(s).

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Manuals of Autocad – Autodesk Inc.
- Computer graphics and design, Radhakrishnan
- Inside Autocad--parker,denial& rice
- Google SketchUp user's guide.
- Adobe Photoshop user guide/manual.
- Google SketchUp for Interior Designers – Daniel John Stine
- Rendering in SketchUp – Daniel Tal
- V-ray user's Guide.
- Lumion user's guide/manual.
- Architectural Design with SketchUp – Alexander Schreyer

Interior Project Management

Course Code: BID 505

Credit Units: 03

Teaching hours: 03

Course Objective:

Introduction of networking techniques and construction planning practices. Use of construction equipment and method along with quality control. To familiarize students with building construction practices, technology & sequencing for various items of works ranging sub structures, super structures, finishes and services installation.

Course Contents:

Module I: Introduction to Networking Techniques

Introduction to networking techniques: Use of computer aided Microsoft Project/ CPM/ PERT for planning, scheduling and control of construction works; computerized network scheduling and bar charts; errors in networks; types of nodes and node numbering system.

Module II: Introduction Construction Planning

Planning for construction and site facilities using network; preparation of construction schedule for jobs, materials, equipment, labour and budgets using Microsoft Project/ CPM/

Module III: Construction Quality Control

Construction quality control and inspection; significance of variability in estimation of risk; construction cost control; crashing of network

Module IV: Construction Equipment and Methods

Equipment for earth construction and application; concrete construction; production; handling; procurement; Placement; temperature control etc.

Module VI: Construction & Services

Sequence of construction from civil works, electrical HV & LV, plumbing, HVAC, fire safety, Furniture work and other services.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- Construction, Planning Management – U.K. Srivastav
- Construction Planning, Equipment and Methods – R.L. Peurifoy
- Construction Performance control ny networks – H.N. Ahuja
- Construction Project Management – K.K. Chilkar
- Construction Planning and Management – M.B. Dhir & S.P. Ghilot

References:

- Project Management – S. Chaudhary
- Project Management with CPM and PERT – Moder and Philipese
- Construction Method and Techniques – Mullick Mullind

Building Services – IV
(Fire safety, security and mechanical System)

Course Code: BID 506
End semester exam hours: 03

Credit Units: 02

Course Objective:

To acquaint the student with the fire safety regulation and security systems to be adopted in the buildings. Study the development codes and bye-laws of fire safety regulations, and study about the different methods and materials for treatment in buildings for fire safety.

Course Contents:

Module I: Fire Safety

Introduction: basic understanding about fire, growth decay curve. Causes of fire in buildings, types of fire, spread of fire, production of smoke and poisonous gases. Fire safety and preventive measures.

Module II: Fire properties of materials

Basic fire properties of materials i.e. ignitability, combustibility, surface spread of flame, fire propagation, toxicity etc.: General behavior of materials, combination of fire retardant and non-combustible materials.

Module III: By-laws for firefighting

Firefighting regulations with reference to National Building code. Fire escape, stairways and escape routes, dry and wet risers, Water demand for firefighting, storage tanks, fire hydrants etc.

Module IV: Fire extinguishing

Study of Fire detection systems, smoke detectors, heat detectors, fire alarms etc. Fire extinguishing systems, Unit fire extinguishers, Chemical and foam extinguishers, Chemical and foam extinguishers.

Module V: Advanced Security Systems

Communication systems in buildings, CCTV, conduits to accommodate the systems. Security and Surveillance. Remote control for security systems and automation

Module VI: Building automation

Introduction to building automation systems, components and application of BAS, Architectural implications and integration. Introduction to lift, escalator, travelers etc.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Fire Safety: National Building Code of India 1983, An Introduction to Building Physics: Narsmhan
- Fire Safety in Buildings by V.K. Jain
- Brannigan, F. L. & Corbett, G. P . (2008). Brannigan's Building Construction for the Fire Service. Sudbury, MA: Jones & Bartlett Publishers.

BUILDING APPRECIATION

Course Code: BID 507

Credit Units: 02

Teaching hours: 02

Course objective:

The objective of the course is to introduce the students to the practice of appreciating architectural built forms.

Course contents:

Module I: Introduction

Introduction to building appreciation and analysis of the evolution of buildings and its necessity. Introduction also includes guidelines and parameters to appreciate any building.

Module II: Aesthetic Interpretation

The interpretive understanding of aesthetic experience provides with the opportunity to develop their interpretive skills and heighten their aesthetic responses to various building forms, building textures and building expressions. Analyze, interpret and respond to architectural examples done by architects from past and present. This also includes appreciation of historical works and background of previous era.

Module III: Historical Perspective

Examining historical perspectives help realize the need to understand the past and thoughtfully consider the future to contextualize current knowledge about buildings and their elements. Identify and describe appropriate systematic and scientific strategies to examine historical built forms and methods.

Module IV: Guidelines for Building Appreciation

Develop critical thinking skills, ability to reflect and explain the meanings of architectural works

Understand how architectural building works shape and reproduce social ideas, values and concerns and how they interact with and influence society, history and culture.

Note: Students shall be given an example of Building appreciation to record their experiences

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

- Kenneth Lindley, Appreciation of Architecture: Landscape and Building (C.I.L.) Paperback – February, 1972
- [Carol Davidson Cragoe](#), How to Read Buildings: A Crash Course in Architectural Styles, Rizzoli, 2008
- Francis D.K. Ching, A Visual Dictionary of Architecture, Wiley, 1996
- [Kevin McCloud](#), Grand Designs Handbook: The blueprint for building your dream home, Collins, 2009

BID 508 ENERGY CONSERVATION ARCHITECTURE

Course Code: BID 508

Credit Units: 02

Teaching hours: 02

Course Objective:

To familiarize students with principles, techniques and guidelines for planning and design of energy conserving architecture. Study of solar energy systems and other alternative sources of energy being used in architectural applications.

Course Contents:

Module I: Introduction

Classification and characteristics of energy resources, Use and exploitation of resources, Resource use in architecture / exploitation of resources for development, Resource shortage and constraint, Concepts and need for conservation, Renewable, non-renewable resources and alternate sources of energy. Need and necessity of energy conservation.

Module II: Energy conserving architecture

Principles of energy conservation, Pattern of energy use in buildings, Technologies and methods of conservation, Economic, technological and environmental implications. Ambient energy and lifecycle requirement of energy in different types of buildings. Use and possibility of alternate sources of energy.

Module III: Conservation of other resources

Conserving building materials, water, land etc. in architecture, methods of conservation and their implication. Understanding the concept of zero energy buildings.

Module IV: Design of energy conserving architecture

Fundamentals of planning and design, Elements and principles of design, Study of design problems, Application of relevant principles for design solutions, Innovative and appropriate construction technologies. Use of landscaping elements in energy conservation.

Module V: Students shall workout a practical exercise of converting one of their designs into energy conserving building.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

Text:

- Alternative Natural Energy Sources in Building Design: Davies and Schubert.
- Design with nature: I. McHarg
- The Ecological Context: H. McHale.

References:

- Human Ecosystems: W. B. Jr. Clapham.
- Review our dying planet: S. Devi.
- Energy Conservation Standards: for building design, construction and operation, S. Fred Dubin.

Module I: Digital Architecture

Introduction to Digital Architecture, Digital Architecture terminologies, digital theories and History of Digital Architecture, Difference between conventional design approach and Digital design process,

Module II: Digital Architecture software:

Introduce to digital Design Process, Software as design tools, Associative modeling, Concept of artificial intelligence, Application of expert system in architecture.

Module III: Digital Techniques in Architecture

Building Automation System, Current trend and innovation, Effect of building automation on functional efficiency, Components of Building Automation, Application of 3D printing machines and techniques.

Module IV: Parametric design:

Relation of **Architecture and Algorithm**, Basic Application of algorithmic techniques in design methodologies, coding principles, artificial life, material intelligence,

Module V: Design exercise of a digitally designed building.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text &References:

- Contemporary Processes in Architecture – by Ali Rahim
- Digital Cities AD: Architectural Design – Prof. Neil Leach
- Performative Architecture : Beyond Instrumentality – by Branko Kolarevic
- Versatility and Vicissitude: Performance in Morpho-Ecological Design- by Michael Hensel
- Biosensors for environmental monitoring – by Ursula Bilitewski, Anthony Turner
- Biosensor principles and Application – by Loic J.Blum, Pierre R.Coulet
- Digital Tectonics – Prof. Neil Leach
- Contemporary techniques in Architecture – by Ali Rahim
- Digital Fabrications: Architectural and Material Techniques- by Lisa Ewamoto
- From control to design –by Michael Meredith

Course Objective:

To introduce the concept of intelligent buildings and to acquaint the student with the factors to be taken into consideration to build an intelligent building.

Course Contents:

Module I: Introduction to intelligent buildings

Concepts, purpose and scope of intelligent building

Module II: Building Automation System

Concept and application, Current trend and innovation, Effect of building automation on functional efficiency, Components of Building Automation, HVAC, electrical, lighting, security, fire-fighting; Integrated approach in design, maintenance and management system, Concept of artificial intelligence, Application of expert system in architecture.

Module IV: Artificial Intelligence

Introduction to artificial intelligent, intelligent behavior, Development of Artificial Intelligence, Concepts of Artificial Intelligence, Applications of Artificial Intelligence

Module IV: Expert System

Introduction to expert system, objectives, features and components of expert system, Applications of Expert Systems, benefits and limitations of Expert Systems

Module V: Intelligent Systems in Building

Intelligent HVAC, Intelligent lighting, intelligent security, Intelligent fire fighting, Intelligent openings, Intelligence with respect to telecommunications

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

Text:

- Intelligent Fuzzy Optimal Control of Building Structures – Engg. Str. V-20n3, March '98, pp. 184.
- Intelligent Controller with Closing Problems for Building Systems International Conference, Proceeding, 1998.
- Intelligent Component Health Monitoring System.
- Integration of Communication Networks Automation in Construction, V-6n 5-3

References:

- Intelligent Building System for Airport, ASHRAE Journal V-39 N 11, Nov. '97 pp. 31-35
- Maintenance System of Electrical Facilities Proceedings of the Annual Conference, 1997.

Course Objectives:

To educate the students on VastuShastra so that our own built environment should be in harmony with the energy of the inmates living in it. To expose the students to the various theoretical and practical aspects of VastuShastra. To familiarize with the ancient mode of designing a building in amalgamation with the latest technologies available.

Course Contents:

Module I Introduction to Vastu

Introduction to Vastu, History of Vastu, Vedas and other ancient books, Growth of Vastu, Vastu and today, Scientific definition of Vastu, Solar Passage & Buildings with research referencing, Solar Energy, Humans & Buildings, Cosmic Energy & Flow:

Module II : Vedic Vastu

Concept of Vedic Vastu, VastuPurush, Mandalas, Five Elements Theory, Planets & Directions.

Module III : Planning As per Vastu

Direction and Corners, Eight directions, Importance of directions, Slope & Loading Pattern, Open space & balconies, Shapes, Vedic opinion on entries, Alternative opinion on entries, Main Door & Main Gate. Planning for Bedroom, Kitchen, Puja room, Bathroom, Children's room, Drawing Room, Living Room, Office Room.

Module IV : Land & Location as per Vastu

Angles in a Plot & Building, Veedhi Shoola, Angles & Extentions, Shermukhi & Gaumkhi plot, Good & Bad Location. Selection of land & soil test, Examination of the land as per Mayamata & Brahit Samhita, Types of Land as per Vedic books, auspicious land & Inauspicious land, Obstructions.

Scientific correlation of Vaastu

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

Text:

- B.B. Puri, Applied Vastu Shastra in Modern Architecture
- Michael Borden, Vastu Architecture: Design Theory and Application for Everyday Life
- Kathleen Cox, Vastu Living: Creating a Home for the Soul
- Talavane Krishna, TheVaastu Workbook: Using the Subtle Energies of the Indian Art of Placement
- Sherri Silverman, Vastu: Transcendental Home Design in Harmony with Nature
- Rohit Arya, Vaastu: The Indian Art of Placement

- Maharishi Vastu, Vastu City Planning: Sustainable Cities in Harmony with Natural Law
- Kathleen Cox, the Power of Vastu Living: Welcoming Your Soul into Your Home and Workplace
- Juliet Pegrum, TheVastuVidya Handbook: The Indian Feng Shui
- Kathleen Cox, Space Matters: Use the Wisdom of Vastu to Create a Healthy Home. 11 Top Designers Show You How
- Satish Grover, Traditional Indian Architecture
- Bubbar, D K, The spirit of Indian architecture: Vedantic Wisdoms of Architecture for Building Harmnious Space and Life

BID 512 ARCHITECTURE PEDAGOGY Course

Code: BID 512 Credit Units: 02

Teaching hours: 02

Course Objective:

- To acquaint students with the history of development of education methods in architecture
- To introduce the students with the prevailing models of teaching-learning methods and their application in architectural design education
- To familiarize students with the skills to evaluate architectural design and other art forms.
- To introduce research methodology, paper writing and presentation as tools to transmit knowledge

Course Contents:

Module I: History and development of Architectural Education

Traditional teaching methods of India – Gurukul, Universities of Nalanda & Takshashila; Transmission of knowledge in architecture through temple architecture in ancient India; History of formal architecture education in West and in India. Peculiar requirements of Architecture Education, Requirements of generation of creative thinking

Module II: Introduction to learning methods

Aims and objectives of architecture education in India, Blooms Taxonomy, Levin's field theory, Carl Roger's theory of experiential learning, Peculiar requirements of Architecture Education; Models of Teaching: Advanced Organizer, Concept Attainment Model, Simulations – Use of advanced softwares to shape and visualize ideas, Synectics, Concept Mapping for organizing & communicating ideas, Basic aspects of classroom management

Module III: Design Process pedagogy

Various thinking skills, tools and techniques adopted by architects for deriving design ideas, Development of Design Thoughts, Experiential learning (case study methods) as guide in Design process, Use of synectics in the design studio, the essence of creativity in synectics, various forms of metaphoric thinking to activate "generative thinking."

Module IV: Appreciation & Criticism – assessment of architecture design

Arts, skill and technique of visual perception and form analysis, communication of the aesthetics of architecture and other associated art forms in a journalistic manner.

Module V: Research Methodology, Paper Writing and Presentation

Research methodology, proposing projects for research design, standardized methods of paper writing and presenting.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

- S. K. Mangal (2009) "Essential of educational technology", PHI Learning Pvt. Ltd., 2009.
- Bruce Joyce and Marsha Weils, "Models of Teaching", Pearson; 9 edition (April 14, 2014)
- Klausmier and Ripple (1971) "Learning and Human Abilities" Harper & Row, New York.
- Eames Charles & Ray, "An Eames Anthology", Yale University Press, Edited by Ostroff Denial.
- George Kneller (1971), "Philosophy of Education" John Wiley & Sons Inc; 2nd Revised edition
- J. S. Chauhan, "Advanced Education Psychology" Sumit Prakashan
- J. C. Agrawala (2009), "Essential of educational technology" Vikas Publishing House Pvt Ltd, 01-Nov-2009
- Bruce Joyce (2014), "Models Of Teaching" Pearson; 9 edition (April 14, 2014)
- 2. Rizzoli (March 18, 2008); "How to Read A Building" Rizzoli (March 18, 2008);
- Bruce Joyce, "Models Of Teaching", Pearson; 9 edition (April 14, 2014)
- New Trends in Architecture Education, By- Ashraf Salama

BCS 501 COMMUNICATION SKILLS - III**Course Code: BCS 501****Credit Units: 01****Teaching hours: 01****Course Objective:**

To equip the participant with linguistic skills required in the field of science and technology while guiding them to excel in their academic field.

Course Contents:**Module I**

Reading Comprehension

Summarising

Paraphrasing

Module II

Essay Writing

Dialogue Report

Module III

Writing Emails

Brochure

Leaflets

Module IV: Introduction to Phonetics

Vowels

Consonants

Accent and Rhythm

Accent Neutralization

Spoken English and Listening Practice

Examination Scheme:

Components	CT1	CT2	CAF	V	GD	GP	A
Weightage (%)	20	20	25	10	10	10	5

CAF – Communication Assessment File

GD – Group Discussion

GP – Group Presentation

Text & References:

- Effective English for Engineering Students, B Cauveri, Macmillan India
- Creative English for Communication, Krishnaswamy N, Macmillan
- A Textbook of English Phonetics, Balasubramanian T, Macmillan

BSS 501 BEHAVIOURAL SCIENCE – V(Group Dynamics and Team Building)**Course Code: BSS 501****Credit Units: 01****Teaching hours: 01****Course Objective:**

To inculcate in the students an elementary level of understanding of group/team functions To develop team spirit and to know the importance of working in teams

Course Contents:

Module I: Group formation	Definition and Characteristics Importance of groups Classification of groups Stages of group formation Benefits of group formation
Module II: Group Functions	External Conditions affecting group functioning: Authority, Structure, Org. Resources, Organizational policies etc. Internal conditions affecting group functioning: Roles, Norms, Conformity, Status, Cohesiveness, Size, Inter group conflict. Group Cohesiveness and Group Conflict Adjustment in Groups
Module III: Teams	Meaning and nature of teams External and internal factors effecting team Building Effective Teams Consensus Building Collaboration
Module IV: Leadership	Meaning, Nature and Functions Self leadership Leadership styles in organization Leadership in Teams
Module V: Power to empower: Individual and Teams	Meaning and Nature Types of power Relevance in organization and Society
Module VI: End-of-Semester Appraisal	Viva based on personal journal Assessment of Behavioural change as a result of training Exit Level Rating by Self and Observer

Examination Scheme:

Components	SAP	A	Mid Term Test (CT)	VIVA	Journal for Success (JOS)
Weightage (%)	20	05	20	30	25

Text & References:

- Organizational Behaviour, Davis, K.
- Hoover, Judith D. Effective Small Group and Team Communication, 2002, Harcourt College Publishers
- Dick, Mc Cann & Margerison, Charles: Team Management, 1992 Edition, viva books
- Bates, A. P. and Julian, J.: Sociology - Understanding Social Behaviour
- Dressers, David and Cans, Donald: The Study of Human Interaction
- Lapiere, Richard. T – Social Change
- Lindzey, G. and Borgatta, E: Sociometric Measurement in the Handbook of Social Psychology, Addison – Welsley, US.
- Rose, G.: Oxford Textbook of Public Health, Vol.4, 1985.
- LaFasto and Larson: When Teams Work Best, 2001, Response Books (Sage), New Delhi
- J William Pfeiffer (ed.) Theories and Models in Applied Behavioural Science, Vol 2, Group (1996); Pfeiffer & Company
- Smither Robert D.; The Psychology of Work and Human Performance, 1994, Harper Collins College Publishers

**FOREIGN LANGUAGE 501
FLF 501 FRENCH - V**

Course Code: FLF 501

Credit Units: 02

Teaching hours: 02

Course Objective:

To furnish some basic knowledge of French culture and civilization for understanding an authentic document and information relating to political and administrative life

Course Contents:

Module D: pp. 131 – 156 Unités 10,11

Contenu lexical : **Unité 10 :** Prendre des décisions

1. Faire des comparaisons
2. décrire un lieu, le temps, les gens, l'ambiance
3. rédiger une carte postale

Unité 11 : faire face aux problèmes

1. Exposer un problème.
2. parler de la santé, de la maladie
3. interdire/demander/donner une autorisation
4. connaître la vie politique française

Contenu grammatical:

1. comparatif - comparer des qualités/ quantités/actions
2. supposition : Si + présent, futur
3. adverbe - caractériser une action
4. pronom "Y"

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- le livre à suivre : Campus: Tome 1

Course Objective:

To enable the students to converse, read and write in the language with the help of the basic rules of grammar, which will later help them to strengthen their language.

To give the students an insight into the culture, geography, political situation and economic opportunities available in Germany

Introduction to Advanced Grammar and Business Language and Professional Jargon

Course Contents:**Module I: Genitive case**

Genitive case – Explain the concept of possession in genitive Mentioning the structure of weak nouns

Module II: Genitive prepositions

Discuss the genitive prepositions and their usage: (während, wegen, statt, trotz)

Module III: Reflexive verbs

Verbs with accusative case

Verbs with dative case

Difference in usage in the two cases

Module IV: Verbs with fixed prepositions

Verbs with accusative case

Verbs with dative case

Difference in the usage of the two cases

Module V: Texts

A poem 'Maxi'

A text Rocko

Module VI: Picture Description

Firstly recognize the persons or things in the picture and identify the situation depicted in the picture;

Secondly answer questions of general meaning in context to the picture and also talk about the personal experiences which come to your mind upon seeing the picture.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Wolfgang Hieber, Lernziel Deutsch
- Hans-Heinrich Wangler, Sprachkurs Deutsch
- Schulz Griesbach, Deutsche Sprachlehre für Ausländer
- P.L Aneja, Deutsch Interessant- 1, 2 & 3
- Rosa-Maria Dallapiazza et al, Tangram Aktuell A1/1,2
- Braun, Nieder, Schmöe, Deutsch als Fremdsprache 1A, Grundkurs

FLS 501SPANISH - V

Course Code: FLS 501

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable students acquire working knowledge of the language; to give them vocabulary, grammar, voice modulations/intonations to handle everyday Spanish situations with ease.

Course Contents:

Module I

Revision of earlier semester modules

Module II

Future Tense

Module III

Presentations in English on
Spanish speaking countries'

Culture

Sports

Food

People

Politics

Society

Geography

Module IV

Situations:

En el hospital

En la comisaria

En la estacion de autobus/tren

En el banco/cambio

Module V

General revision of Spanish language learnt so far.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Español Sin Fronteras, Greenfield

FLJ 501 JAPANESE - V

Course Code: FLJ 501

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable the students to converse, read and write language comfortably and be able to converse using different patterns and forms taught through out. Students are taught and trained enough to get placed themselves in Japanese companies.

Note: Teaching is done in roman as well as Japanese script.

Course Contents:

Module I

Dictionary form of the verbs, joining of verbs

Negative form of verbs

Potential form

Module II

Joining of many actions together

Usage of dictionary form of the verbs in sentences

Introducing colloquial language.

Module III

Direct form of the speech, quotations,

Expressing thoughts

Actions and reasoning

Module IV

Conclusion

Receiving and giving things, favour etc.

Different forms like 'tara' form.

Module V

Revision of the whole syllabus

Learning Outcome

- ▲ Students can speak and use different patterns, ways to describe a particular situation and can converse comfortably in mentioned situations through out.
- ▲ Students can appear in the interviews for placements in Japanese companies.

- ▲ Teaching will be supported by handouts, audio-aids, and self-do assignments and role plays.
- ▲ Use of library, visiting and watching movies in Japan and culture center every Friday at 6pm.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

Text:

- Teach yourself Japanese

References:

- Shin Nihongo no kiso 1

FLC 501 CHINESE – V**Course Code: FLC 501****Credit Units: 02****Teaching hours: 02****Course Objective:**

What English words come from Chinese? Some of the more common English words with Chinese roots are ginseng, silk, dim sum, fengshui, typhoon, yin and yang, T'ai chi, kung-fu. The course aims at familiarizing the student with the basic aspects of speaking ability of Mandarin, the language of Mainland China. The course aims at training students in practical skills and nurturing them to interact with a Chinese person.

Course Contents:

Module I	Drills Dialogue practice Observe picture and answer the question. Pronunciation and intonation. Character writing and stroke order
Module II	Intonation Chinese foods and tastes – tofu, chowmian, noodle, Beijing duck, rice, sweet, sour....etc. Learning to say phrases like – Chinese food, Western food, delicious, hot and spicy, sour, salty, tasteless, tender, nutritious, good for health, fish, shrimps, vegetables, cholesterol is not high, pizza, milk, vitamins, to be able to cook, to be used to, cook well, once a week, once a month, once a year, twice a week..... Repetition of the grammar and verbs taught in the previous module and making dialogues using it. Compliment of degree “de”.
Module III	Grammar the complex sentence “suiran ... danshi....” Comparison – It is colder today than it was yesterday.....etc. The Expression “chule...yiwai”. (Besides) Names of different animals. Talking about Great Wall of China Short stories
Module IV	Use of “huozhe” and “haishi” Is he/she married? Going for a film with a friend. Having a meal at the restaurant and ordering a meal.
Module V	Shopping – Talking about a thing you have bought, how much money you spent on it? How many kinds were there? What did you think of others? Talking about a day in your life using compliment of degree “de”. When you get up? When do you go for class? Do you sleep early or late? How is Chinese? Do you enjoy your life in the hostel? Making up a dialogue by asking question on the year, month, day and the days of the week and answer them.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- “Elementary Chinese Reader ” Part-II Lesson 39-46

INTERIOR DESIGN - V

Course Code: BID 601

Credit Units: 05

End semester exam hours: 06

Course Objective:

The objective of the course is to introduce the students to the different types of Commercial and Corporate spaces and interior design requirements related to them. The course should involve different design ideas and schemes to represent the designing of retail spaces.

Course Contents:

Module I: Introduction to Commercial & Retail Space Design

Understanding of Retail Space Design through Literature and Case studies of existing projects. Market Study of furniture, interior materials and finishes and lighting fixtures. A bound report needs to be submitted .

Module II: Retail Kiosk

Designing of a small retail kiosk or shop inside a Commercial building . Preparation of conceptual 2D and 3D sketches, schematic design showing plan, elevations, section and rendering of drawings.

Module III: Retail Outlet Design

Designing of a retail outlet of an estimated area of 300-400sq.m. Preparation of conceptual sketches and then working on a schematic and design development. Preparing detailed Furniture layout, Floor Finish Plan, Reflected Ceiling Plans and Interior Elevations and 3d-representation of the complete interior space and 3D representation.

Module IV: Introduction to Corporate Space Design

Literature and Case studies of existing Corporate & Office spaces and modular furniture. Designing an Office space of an estimated area of 150-200sq.m. Preparation of conceptual sketches and detailed Furniture layout, Floor Finish Plan, Reflected Ceiling Plans and Interior Elevations and 3d-representation of the complete interior space.

Module V: Model & Material Boards & Detailed Estimate

Preparing a physical model of at least one major project showing complete interiors. Preparing a material board, which has a list of all the materials and finishes used in individual's Retail design. Preparing a Detailed estimate for furniture, materials and finishes and labor cost incurred for one of the major project.

Examination Scheme:

Components	A	S1	S2	CT	Viva	EE
Weightage (%)	05	15	20	10	20	30

Text & References:

Text:

- Design Fundamental in Architecture, Walter Gropius
- Interior Best Collection, Commerce Asia II, Archiworld
- Interior Design- Ahmed Kasu
- Interior Design Illustrated - Francis D.K. Ching
- Time Saver standards for Interior Designing and Space Planning , Joseph Dechiara and [Julius Panero](#)

References:

- A.J. Metric Handbook, editors, Jan Bilwa and Leslie Fair weather
- Architectural Graphic standards editor, Boaz Joseph
- Neufert's Architect's data
- Time Saver standards for building types, editor Joseph D.C. and John Callender.

ADVANCED CONSTRUCTION TECHNIQUES

Course Code: BID 602

Credit Units: 03

End semester exam hours: 03

Course Objective:

To familiarize student with advance building materials and their construction details.
Learning construction details of various building parts at advanced level.

Course Contents:

Module I: Steel and Other metals

Study of steel as building material: types/ properties and treatment and various uses.
Visual and textural properties, Varieties and application of steel, brass, bronze, copper and other metals and alloys.

Module II: Stainless Steel and other Metals in Interiors

Use Stainless Steel and other metals in interiors such as Furniture Design and various interior applications.

Module III: Advanced Interior details

Advance details of grooves, beading and patterns in furniture and fixtures and their continuity, understanding the use of modern fixtures and hinges as applied to various building material. Students shall prepare details of some of works done by them in the previous years.

Module IV: Commercial, Office and Industrial Interiors

Industrial flooring, Raised flooring System and miscellaneous materials and finishes used in Commercial, Office and Industrial applications.

Module V: Hardware in Interior Application

Hardware used in Interiors. Types of Hinges/ Knobs/ Bolts/ locks in different materials with understanding of their specific uses. Hardware fittings in bathroom.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Building construction W.B.McKay
- Building construction R Berry
- Building construction Chudley
- Building construction Francis D.K. Ching
- Design of Steel Structure, Negi
- Structure in Architecture, Salvadori and Heller.

PROFESSIONAL PRACTICE

Course Code: BID 603

Credit Units: 02

Teaching hours: 02

Course Objective-To acquaint the students about different Professional and Legal bodies related to the Interior and Architecture Design Profession, their role and importance. To make the students understand the professional intricacies, professional responsibilities and conduct, legal obligations and implications so that at the end of their studies the Students is familiar of their responsibilities as a professional.

Module I: Professional Bodies-

Familiarization with different Professional Bodies directly and in-directly related to architecture profession such as The Indian Institute of Interior Designers (IIID), The Indian Institute of Architects (IIA), The Council of Architecture (COA),etc.

Module II: Discussions in Detail about IIID

Its formative History, rules and regulations, membership procedure and categories, IIID Elections, Functions and formation of the IIID Council, importance, professional and trade practices and ethics.

Module III: Code of Professional Conduct and scale of professional charges

As laid down by the COA and modified from time to time. Procedures to be followed by an architect for the safe running of the Practice. Awareness about Interior Design Competitions and the Procedure lay down by the IIID. Do's and Don'ts for Interior Competitions.

Module IV: Minimum Standards of Interior Education

The implication of the regulations on the profession. Procedure followed by the COA for maintenance of the set standards.

Module V: Tendering for Interior Design of Buildings

Types, details of a tender document, procedure to be followed for calling tenders, tender analysis, election of the contractor and award of the work. Important terms such as EMD, Security Deposit, Defect Liability, Insurance etc.

Module VI: Contracts

Types of the Contracts, legality of the Contract, important clauses of the Contract, role of the owner, architect and the contractor in fulfillment of the contract.

Module VII: Setting up of Interiors Office and start of Practice

Size of the office, location, infrastructure requirement, staff requirement etc. Procurement of the works. Important activities in a professional office.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

Text:

- COA document of Architect's Act 1972
- COA Documents/Handbook

References:

- Professional Practice in India – S.K. Sahu
- Code of Architectural Practice – B.M. Basu

DISSERTATION

Course Code: BID 604

Credit Units: 03

Course Objective:

The objective is to introduce students to the research based project and its analysis. A research study will be undertaken by each student of different topics of immediate relevance to the professional knowledge. The study would include a through literature survey as well as data collection from the field service or by contact with practicing Architects, Interior designers and public at large as clients. Each student will prepare an analytical research project based on the above information and submit in the form of a well-complied document duly illustrated with relevant diagrams, sketches and informatics presentation.

Note: Dissertation can be treated as a preamble as the base of the thesis done on individual basis so the students could learn to work on research project

Course Contents:

Module I: Introduction

Introduction to the dissertation project and get the project/ topic approved by the school and respective faculty giving suitable justifications and reasons for the research. The proposal of research should include the aims, objectives, methodology, limitations, bibliography, site etc. at the time of approval of topic.

Module II: Collection and Analysis of Data (Case Study)

Site and surroundings survey- location, local climatic conditions, topography, existing landscape, socio- cultural impact on design. Study the site potentials in term of energy conservation and natural conditions.

Module III: Analysis of Data

Research analysis and data collection, Justification to topic selected. Detailed study of functions, Study of relationship of built and open spaces, interlinking of various activities.

Module IV: Methodology

Methodology of research, Data analysis, Data compilation.

Module V: Presentation

Preparation of analysis report with suitable drawings for discussion

Submission: The submission will be in the hard Bound A-4 Size Report. The research should include the followings:

Selection of Dissertation topic Methodology of research	Justification to topic selected Research analysis and Data collection	Site analysis and justification
		Case Studies and Market Study of Materials & Finishes
User requirements and standards	Analysis	Inferences
Conclusions	Recommendations/ Suggestions	Bibliography

Examination Scheme:

Components	A	C	P1	Viva
Weightage (%)	05	15	30	50

Text & References:

Text:

- Creative Interiors (Design of Enclosed Space), Shashi Jain
- Commercial Interior Perspectives, Graphic – Sha (Editor)
- Design with Wood , Carol Soucek King
- Drywall (Pro Tips for Hanging & Finishing), John D. Wagner
- Interior design illustrated , Francis D.K. Ching
- Graphic Interiors (Space Designed by Graphic Artists), Corina Dean
- Home Plumbing (The David & Charles Manual of) , Ernest Hall
- House Book (The Complete Guide to Home Design), Terence Conran

References:

- Architectural Graphic standards, Boaz Joseph
- The Curtain Book, Mitchll Beazlty
- Interior Design Visual, Maureen Mitton 2nd Edition

BUILDING SERVICES – V

(HVAC system)

Course Code: BID 605
End semester exam hours: 03

Credit Units: 02

Course Objective:

Integration of HVAC system with building design & its application. To expose the students to the areas of air-conditioning, heating and ventilation in buildings of various types so that there integration could be done in most appropriate manner right at the design stage.

Course Contents:

Module I: Ventilation

Natural and artificial ventilation systems; estimation of ventilation requirements; mechanical ventilation in buildings; scheme and equipment required for ventilation spaces like industrial kitchens, underground garages, and multistoried buildings and parking spaces.

Module II: Air conditioning

Principles of Air conditioning; concept of thermal comfort; physiological principles; reaction of human body to the thermal environment; principles of psychometric; psychometric chart; selection of indoor and outdoor design conditions; refrigeration and air cycle; cooling and heating load calculations; various systems of air conditioning; duct work and air conditioning layout, fittings and fixtures; evaporative cooling, fair conditioning and its suitability. Types of systems- cooling tower, geothermal heating and cooling

Module III: Equipment's

Scheme and equipment required for HVAC; their placement and physical space requirements.

Module IV: Load calculation

Cooling and heating load calculations; Introduction to British thermal unit and other factors; various systems of air conditioning; duct work and air conditioning layout, fittings and fixtures; evaporative cooling.

Module V: HVAC design

Design and drawing of HVAC system for a building designed in previous semester.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Manohar Prasad, 'Refrigeration & Air conditioning'
- C.P. Arora, 'Refrigeration & Air conditioning'
- Modern Air-Conditioning, Heating and Ventilation: Carrer and G. Pitman.
- Air Conditioning and Ventilation, Servems and Fellows, John Wiley
- Ernest Tricomi-ABC of Air conditionin g
- Basics of Air conditioning by ISHRAE
- All about Insulation by ISHRAE
- ISHRAE HVAC Handbook 1997 Part - 1 -Air Conditioning
- ISHRAE HVAC Handbook 2004 Industrial Ventilation Applications
- ISHRAE The Hand Book on Green Practices

STUDY TOUR & OTHER ACADEMIC / PROFESSIONAL ACTIVITIES-III (Evaluation)

Course Code: BID 606

Credit Units: 01

Teaching hours: NIL

Guidelines:

- Students shall visit different sites and parts of Rajasthan covering different aspects.
- The report shall be evaluated and marks shall be added in even semester, for study tour.
- It shall be related to the studies done in History of Interior Design, Art & culture and Interior Design of current & previous semester.
- Evaluation for all extracurricular activities will be done in this course (for current & previous semester).

The Layout Guidelines for the Report

- A4 size Paper
- Font: Arial (10 points) or Times New Roman (12 points)
- Line spacing: 1.5
- Top and bottom margins: 1 inch/ 2.5 cm; left and right margins: 1.25 inches/ 3 cm
- The report can be hand written as well
- The report shall be properly bound and submitted individually.

Assessment Scheme:

Continuous Evaluation:

50% (Based on punctuality, regularity of work.)

Final Evaluation:

50% (Based on the Documentation in the file/ presentation/ viva)

Course Objective:

To familiarize the students with various aspects of Architectural Conservation. To understand the role of a conservationist architect.

Course Contents:**Module I: Introduction**

Necessity, Values and Ethics, Principles and Scope of architectural conservation. **Module II: Methodology of Conservation**

Understanding basic principles of conservation such as (a) Prevention (b) Preservation (c) Conservation (d) Restoration (e) Rehabilitation (f) Reproduction (g) Reconstruction (h) Adaptation

Module III: Structural Aspects of Buildings

Understanding Structural elements: beams, arches, vaults and domes; trusses and frames; piers, columns and foundations etc. accessing their losses and ways to conserve the same for longer life of building.

Module IV: Causes of Decay in Buildings

Natural and human factors; Environmental influences – thermal effect, corrosion and oxidation; Disasters; Botanical and biological causes. Accessing the extent of decay and devising the means to recover.

Module V: Building Repairs

Structural repairs, carpentry; Repairs of plaster work, paint work; Glass and mosaic surface repairs; Repair of excessive moisture etc. Understanding fundamentals of repairs of conservation for different purposes.

Module VI: Professional Practice

Investigation, documentation and analysis and preparation of inspection reports, Preventive maintenance; Legal provisions; Management and phasing, presentation of heritage buildings. Cost estimation and cost control Rehabilitation and adaptive use of buildings

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:*Text:*

- Conservation of Buildings by J. H. Harvey
- An Introduction to Conservation by B. M. Feildon

References:

- A Critical Bibliography of Building Conservation by J. F. Smith.
- The Conservation of Historical Buildings by B. M. Feildon

BID 608 MODULAR CONSTRUCTION TECHNOLOGY

Course Code: BID 608

Credit Units: 02

Teaching hours: 02

Course Objectives:

The course of Modular Construction is aimed at focusing on the study of use of pre-fabrication systems, systems developed by CBRI and other agencies, basic modular planning and the proportioning systems and using the skills in designing of buildings. In today's context when various components of building construction happens off site, it is important to design as per the units/modules, repetition of which gives a modularly coordinated design and helps in easy and fast construction. Thus, the student will be able to demonstrate knowledge of building construction and management with application of Modular coordination and pre-fabrication concepts in their design.

Module I: Orientation to Modular Construction

- Defining the concept of Modular Construction
- Introduction to system building, mechanization of production of different parts and components of building types of building sizes.
- Review of market to know availability of modular materials

Module II: Advantages & disadvantages of Modular coordination

- Classification of prefabrication systems developed CBRI, skeletal system, Brick panel system, non-structural elements, deviations in prefabrication.
- Manufacturing of modules and their transport to the site.
- Prefabrication; advantages, disadvantages and relevance in Indian context.
- Shuttering and construction system for Use of RMC modular spaces and planning coordination requirements. of fixtures and components.

Module III: Modular planning of an interior space

Introduction to modular practice, basic modular planning and component Module, modular number pattern introduction. System of proportion-introduction of various systems and comprehensive industrialized building-introduction and application. Development of planning Module and structural Modules for various types of buildings in India.

Module IV: Review of works of masters on modular construction such as Le Corbusier etc. and presentation of a report.

Module V: Construction requirements for modular construction design of building as per the availability of interior modular component such as tiles/ kitchen cabinets etc. to avoid wastage. Shuttering and scaffolding requirements. Introduction of 'MIVAN' shuttering system for making multiple housing units and its economics.

Examination Scheme:

Components	A	CE	CT	EE
Weightage (%)	05	25	20	50

Text & References:

Text:

- Duffy, F, Cave, C, Worthington, J. – Planning office space. Architectural Press, London, 1976.
- Duffy, F. – New Office. Conran Octopus, London, 1997.
- Meel, J. V.- The European office: Office design and national context. 010 Publishers, Rotterdam, 2000.
- Harris, D. A. – Planning and designing the office environment. Van Nostrand Reinhold, New York, 1981.
- Neufert P, -Neufert Architects'Data- Third Edition by Blackwell Science Ltd. Oxford 2000

BID 609 ARCHITECTURAL PHOTOGRAPHY Course

Code: BID 609 Credit Units: 02

Teaching hours: 02

Course Objective:

This course will teach students to create successful images of exterior architecture, interior architectural design, as well as architectural models. The course discusses equipment, processes, and procedures necessary for the photography of building exteriors and interiors, dusk/night and night architectural landscapes, and construction progress. Students will learn to use Digital SLR camera, lighting techniques, software and to create output. Students will be able to use High Dynamic Range (HDR) : multiple exposures to create dramatic architecture/interior images without additional professional lighting.

Course Contents:

Module I: Architectural Photography

Origins of architectural photography, Review of architectural photographs, Light and Shades, Understanding light – Properties and elements of light. Basics of camera – Operations and Control

Parallax Error, use of camera, lens and understanding lighting conditions. Pixels, resolution, Sensor size

Module II: Light and Architecture

Understanding light and photography, External lighting- Direction of lighting - front, side, back, shadows, texture, and effects of clouds, light modification, psychological effects, and types of artificial lighting, combined daylight and flash. Overview of architectural photography, Color balance, Reading histogram, White balance and Color temperature.

Module III: Creativity in Shooting

Finding Forms and Shapes, Elements and Principals of framing, Rules of composition, Aesthetic of framing and composition, Perceptual Control, Depth of field and center of confusion, Exterior and interior photography, Flash control

Module IV: Digital Post Production

Introduction to software, RAW file editing, HDR Imaging, Adobe Photoshop and Light room, Retouching and color correction, Printing Preparation

Module IV: Framing Views

Single point and two point perspective- examples, distortions, emphasizing architectural elements, effect of camera to subject distance, oblique angles, three point perspective- applications in interiors and exteriors - composition, symmetric composition, applying the law of thirds - examples, image capture to publication.

Project : Students should submit two projects at the end of the semester.

(a) Interior Photography

(b) Exterior Photography

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

- Ackerman, J. S. (2001). *On the origins of architectural photography*. Mellon lecture, December, 4, 2.
- Harris, M. G., & Harris, M. G. (1998). *Professional architectural photography*. Oxford: Focal Press.
- Rosa, J., & McCoy, E. (1994). *A constructed view: The architectural photography of julius shulman*. Rizzoli Intl Pubns.
- Siskin, J. (2012). *Photographing architecture: lighting, composition, postproduction, and marketing techniques*. Buffalo, NY: Amherst Media.
- Schulz A., *Architectural Photography: Composition, Capture, and Digital Image Processing*, O'Reilly Media Inc., 2010
- Michael Heinrich, *Architectural photography*, Birkhauser, 2009
- Michael G. Harris, *Professional Architectural Photography*, Taylor & Francis, 2002 4.
- Kopelow A., *Architectural Photography the Digital Way*, Princeton Architectural Press, 2007

Course Objectives: To expose the students to the new concept by understanding and recognizing the relation between nature and human thereby developing nature based solution to the architecture problems influenced by biomimetics.

Module 1: INTRODUCTION

Introduction to Biomimicry, Types of Biomimicry, evolution of Biomimicry and the start of the Ecological Age, nature's laws, strategies, and principles - Nature as a model, measure and mentor, changing metaphor and approach organic architecture - animal architecture - complexity of natural organisms and systems - Relationship between nature and architecture.

Module 2 : Biomimicry Concepts

Returning Home To Earth - Natural materials manufacture principles - Inorganic materials - crystallized version of Earth derived materials - Natural construction - adaptation for human use (mud-dauber wasp compass termites, Eastern tent caterpillars, female bauble spiders and the extraordinary Namibian fog-basking beetle, beaver dam construction).

Module 2: Biomimcry in Architecture

Introduction to Biomimcry in Architecture, History and evolution of Biomimcry in architecture, Characteristics of Biomimcry Architecture and its Levels, overlap between biology and architecture, living building - emerging biomimetics - technologies - biomimetics concepts in structural efficiency - material manufacture systems -zero-waste systems energy generation - the thermal environment - nanotechnology in architecture - biomimetics products.

Module 3: Application

Bionic Architecture, Application of Biomimcry in Architecture, Innovations and examples of Biomimcry architecture and its Limitations, Materials and technology in Bionic architecture, Biomimetic cities-Biomimetic future Approach - Nature model - New applications of biological life into Architecture

Module 4: Sustainability and Biomimcry

Biomimcry and Green building, Biomimcry innovations for energy efficiency, Sustainability through Biomimcry

Exercise : Students may study Examples of Buildings case studies - works of Douglas Cardinal, Imre Makovecz, Daniel Liebermann, Eugene Tsui, Jacques Gillet, Petra Gruber etc.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text &References:

- Michael Pawlyn, Biomimicry in Architecture , RIBA Publishing, Sept 2011
- Architecture Without Architecture: Biomimicry Design, Omniscryptum GmbH & Company Kg., 2010 - Nature (Aesthetics)
- Blaine Brownell, Marc Swackhamer, Hypernatural: Architecture's New Relationship with Nature Architecture Briefs, Princeton Architectural Press, 2015
- Eliezer Amador Pérez, Biomimicry/biomimetics in Architecture: A Way to Generate Architecture, University of Florida, 2014
- Janine M. Benyus, Biomimicry : innovation inspired by nature, Harper Collins, 2009
- Gruber P., Biomimetics in Architecture: Architecture of Life and Buildings, Springer, 2010
- Mazzoleni I., Architecture Follows Nature - Biomimetic Principles for Innovative Design (Biomimetics), CRC Press, 2013
- Hansell M., Animal Architecture, Oxford University Press, New York, 2005

Course objective:

The objective of the course is to introduce the students to the practice of arranging and designing landscaping

Course contents:

Module I: Introduction

Introduction to interior landscape; history of evolution; Role and working of landscaping organizations such as ASLA etc.; impact of interior landscaping world-wide; study of examples of various cities in early years and modern usages

Module II: Briefing Interior Landscape

Types of interior landscaping; concepts of horticulture, xeriscaping, etc.; listing and analysis of plants and vegetation as per their usage and climatic conditions

Module III: Principles of Interior Landscape

Ergonomics, topiary, etc concepts for designing/ ornamentation of interior landscaping; representation techniques, graphics and symbols, rendering techniques; study of various fundamentals of designing such as aesthetics, expressions, harmony, etc

Module IV: Working Exercise

Plantscaping an area using any style of Interior Landscaping, providing detail legends of plants, shrubs, etc; using any style of interior landscaping

Module V:

Planters/types and other hardware for interior landscaping

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

Text:

- An Introduction to Landscape architecture by M. Laurie.
- An Introduction to Landscape Design by H. V. Hubbard
- Fundamentals of Landscaping and Site Planning by James B. Root.
- History of Garden Design by D. Clifford
- Tropical Garden Plants in Colour by Bose and Chowdhury

References:

- Colour and Design for Every Garden by Ortloff and Raymore
- Design with Nature by I. Mcharg
- The Way We Live by Alfresco
- New Landscape Design by Robert Holden
- Fundamentals of Ecology by M. C. Dash.
- Landscape Detailing by Michael Ittlewood.

BID 612 DESIGN OF LOGO & SIGNAGES Course

Code: BID 612 Credit Units: 02

Teaching hours: 02

Course objective:

To acquaint the students with graphic design of symbols, logos and signage
To familiarize the students towards its application in the field of architecture and built-environment globally

Course contents:

Module I: Introduction

Definition of Graphic design and its specialized industries; History of Visual communication, pivotal movements & designers that led to the development of Graphic Design industry dealing with Symbols, Logos and Signage as witnessed today.

Module II: Visual Design Fundamentals

Visual design elements and principles, theory of graphics and visualization, Colour theory, Typography and Photography;
2D and 3D visual elements for representation and transformations.

Module III: Design Process – Symbols and Logos

Creative thinking processes and methods; Typology fundamentals; designing, narrating and concept evolution for symbols and logos; Designing fundamentals of words, images, aesthetics, identity and expressions; Case Studies of famous examples of Logo and Symbol design;

Module IV: Design Process - Signage

Understanding importance of signage as per the building typologies; impact of commercial signage on users; ergonomics of informative signage; sign regulations, harmony with contextual urban design, architecture and environment, Design process and Case Studies of key informative and commercial signage.

Module V: Technology

Commercial Printing, materials & techniques for signage fabrication and erection, Signage lighting, Use of Graphic design softwares for designing symbols, logos and signage.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

- Chris Calori, David Vanden-Eynden, Signage and Wayfinding Design: A Complete Guide to Creating Environmental graphic design system, 2015 wiley
- Lisa Silver, Logo Design that Works: Secrets for Successful Logo Design, 2001, Rockport Publishers
- Michelle Galindo, Signage Design, 2011, Braun
- Edo Smitshuijzen, Signage Design Manual, 2007 Prestel Pub

BCS 601 COMMUNICATION SKILLS - IV

Course Code: BCS 601

Credit Units: 01

Teaching hours: 01

Course Objective:

To enhance the skills needed to work in an English-speaking global business environment.

Course Contents:

Module I: Business/Technical Language Development

Advanced Grammar: Syntax, Tenses, Voices

Advanced Vocabulary skills: Jargons, Terminology, Colloquialism

Individualized pronunciation practice

Module II: Social Communication

Building relationships through Communication

Communication, Culture and Context

Entertainment and Communication

Informal business/ Technical Communication

Module III: Business Communication

Reading Business/ Technical press

Listening to Business/ Technical reports (TV, radio)

Researching for Business /Technology

Module IV: Presentations

Planning and getting started

Design and layout of presentation

Information Packaging

Making the Presentation

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

CAF – Communication Assessment File

GD – Group Discussion

GP – Group Presentation

Text & References:

- Business Vocabulary in Use: Advanced Macmillan, Cambridge
- Business Communication, Raman – Prakash, Oxford
- Business Communications, Rodgers, Cambridge
- Working in English, Jones, Cambridge
- New International Business English, Jones/Alexander, Cambridge

BSS 601 BEHAVIOURAL SCIENCE – VI
(STRESS AND COPING STRATEGIES)

Course Code: BSS 601 Credit Units: 01 Course

• **Teaching**

Objective:

To develop an understanding the concept of stress its causes, symptoms and consequences.
To develop an understanding the consequences of the stress on one's wellness, health, and work performance.

Course Contents:

Module I: Stress

Meaning & Nature

Characteristics

Types of stress

Module II: Stages and Models of Stress

Stages of stress

The physiology of stress

Stimulus-oriented approach.

Response-oriented approach.

The transactional and interactional model.

Pressure – environment fit model of stress.

Module III: Causes and symptoms of stress

Personal

Organizational

Environmental

Module IV: Consequences of stress

Effect on behavior and personality

Effect of stress on performance

Individual and Organizational consequences with special focus on health

Module V: Strategies for stress management

Importance of stress management

Healthy and Unhealthy strategies

Peer group and social support

Happiness and well-being

Module VI: End-of-Semester Appraisal

Viva based on personal journal

Assessment of Behavioural change as a result of training

Exit Level Rating by Self and Observer

Examination Scheme:

Components	SAP	A	Mid Term Test (CT)	VIVA	Journal for Success (JOS)
Weightage (%)	20	05	20	30	25

Text & References:

- Blonna, Richard; Coping with Stress in a Changing World: Second edition
- Pestonjee, D.M, Pareek, Udai, Agarwal Rita; Studies in Stress And its Management
- Pestonjee, D.M.; Stress and Coping: The Indian Experience
- Clegg, Brian; Instant Stress Management – Bring calm to your life now

FOREIGN LANGUAGE 601**FLF 601 FRENCH - VI****Course Code: FLF 601****Credit Units: 02****Teaching hours: 02****Course Objective:**

To strengthen the language of the students both in oral and written so that they can:

- i) express their sentiments, emotions and opinions, reacting to information, situations;
- ii) narrate incidents, events ;
- iii) perform certain simple communicative tasks.

Course Contents:**Module D: pp. 157 – 168 – Unité 12****Unité 12 : s'évader**

1. présenter, caractériser, définir
2. parler de livres, de lectures
3. préparer et organiser un voyage
4. exprimer des sentiments et des opinions
5. téléphoner
6. faire une réservation

Contenu grammatical:

1. proposition relative avec pronom relatif "qui", "que", "où" - pour caractériser
2. faire + verbe

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- le livre à suivre: Campus: Tome 1

FLG601

Course Code: FLG 601

GERMAN - VI

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable the students to converse, read and write in the language with the help of the basic rules of grammar, which will later help them to strengthen their language.

To give the students an insight into the culture, geography, political situation and economic opportunities available in Germany

Introduction to Advanced Grammar and Business Language and Professional

Jargon Course Contents:

Module I: Adjective endings

Adjective endings in all the four cases discussed so far

Definite and indefinite articles

Cases without article

Module II: Comparative adverbs

Comparative adverbs as and like

Module III: Compound words

To learn the structure of compound words and the correct article which they take Exploring the possibility of compound words in German

Module IV: Infinitive sentence

Special usage of 'to' sentences called zu+ infinitive sentences

Module V: Texts

A Dialogue: 'Ein schwieriger Gast'

A text: 'Abgeschlossene Vergangenheit'

Module VI: Comprehension texts

Reading and comprehending various texts to consolidate the usage of the constructions learnt so far in this semester.

Module VII: Picture Description

Firstly recognize the persons or things in the picture and identify the situation depicted in the picture;

Secondly answer questions of general meaning in context to the picture and also talk about the personal experiences which come to your mind upon seeing the picture.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Wolfgang Hieber, Lernziel Deutsch
- Hans-Heinrich Wangler, Sprachkurs Deutsch
- Schulz Griesbach, Deutsche Sprachlehre für Ausländer
- P.L Aneja, Deutsch Interessant- 1, 2 & 3
- Rosa-Maria Dallapiazza et al, Tangram Aktuell A1/1,2
- Braun, Nieder, Schmöe, Deutsch als Fremdsprache 1A, Grundkurs

Course Objective:

To enable students acquire working knowledge of the language; to give them vocabulary, grammar, voice modulations/intonations to handle everyday Spanish situations in Present as well as in Present Perfect Tense with ease.

Course Contents:**Module I**

Revision of the earlier modules

Module II

Present Perfect Tense

Module III

Commands of irregular verbs

Module IV

Expressions with **Tener que** and **Hay que**

Module V

En la embajada

Emergency situations like fire, illness, accident, theft

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Español, En Directo I A
- Español Sin Fronteras

FLJ 601 JAPANESE - VI

Course Code: FLJ 601

Credit Units: 02

Teaching hours: 02

Course Objective:

To enable the students to converse in the language with the help of verbs and the usage of different sentence patterns, which help them to strengthen the language. Students are taught and trained enough to get placed in Japanese companies.

Note: The teaching is done in roman as well as Japanese script. 10 more kanjis are introduced in this semester.

Course Contents:

Module I: Polite form of verbs

Expressing feelings with the polite forms of verb.

Module II: Potential form

Ability of doing or not doing something

Module III: Conjunctions

Joining two sentences with the help of *shi* and *mo*

Module IV: Intransitive Verbs

Sentence patterns of indirect speech

Module V: Feelings and expressions

Regret, existence etc.

Learning Outcome

- ▲ Students can speak the language with the use of different forms of verb.

Methods of Private study/ Self help

- ▲ Hand-outs, audio -aids, assignments and role-plays will support classroom teaching.
- ▲ Students are encouraged to watch Japanese movies at Japan Cultural and information center.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Shin Nihon-go no Kiso Lesson No. 26 to 30.
- All vocabulary and topics taught are from the above-mentioned book.

FLC 601 CHINESE – VI

Course Code: FLC 601

Credit Units: 02

Teaching hours: 02

Course Objective:

Chinese emperor Qin Shi Huang – Ti who built the great wall of China also built a network of 270 palaces, linked by tunnels, and was so afraid of assassination that he slept in a different palace each night. The course aims at familiarizing the student with the basic aspects of speaking ability of Mandarin, the language of Mainland China. The course aims at training students in practical skills and nurturing them to interact with a Chinese person.

Course Contents:

Module I

Drills

Dialogue practice

Observe picture and answer the question.

Pronunciation and intonation.

Character writing and stroke order.

Module II

Going out to see a science exhibition

Going to the theatre.

Train or Plane is behind schedule.

Indian Economy-Chinese Economy

Talking about different Seasons of the Year and Weather conditions. Learning to say phrases like -spring, summer, fall, winter, fairly hot, very cold, very humid, very stuffy, neither hot nor cold, most comfortable, pleasant etc.

Module III

Temperature – how to say – What is the temperature in May here?

- How is the weather in summer in your area?
- Around 30 degrees
- Heating, air-conditioning
- Is winter in Shanghai very cold?

Talking about birthdays and where you were born?

The verb “shuo” (speak) saying useful phrases like speak very well, do not speak very well, if speak slowly then understand if speak fast then don't understand, difficult to speak, difficult to write, speak too fast, speak too slow, listen and can understand, listen and cannot understand ... etc.

Tell the following in Chinese – My name is I was born in ... (year). My birthday is ... Today is ... (date and day of the week). I go to work (school) everyday. I usually leave home at .(O'clock). In the evening, I usually (do what)? At week end, I On Sundays I usually It is today..... It will soon be my younger sisters birthday. She was born in (year). She lives in (where). She is working (or studying)..... where... She lives in (where.)

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

Elementary Chinese Reader Part-2 ,3 ; Lesson 47-54

PROFESSIONAL TRAINING

Course Code: BID 701

Credit Units: 25

Course Objective:

To expose the students to the practical environment and works by working under an Architect /Interior Designer.

To gain a practical knowledge and involved in all aspects of office works.

Course Contents:

Students are required to be involved in all works in an Architect's/Interior Designer's office including site visits also. The students should work on projects assign to them in terms of sketch deign, presentation of drawings, Detailed working drawings, model making, estimation, specification, tendering of small projects.

Examination Scheme:

Components	S	Viva
Weightage (%)	50	50

Students are required to submit all the drawings, models, reports etc. on which they have worked and supervised by the Architect under whom they completed the training. Assessment of Professional training will be done in 8th Semester.

DETAILING OF INTERIOR

Course Code: BID 801

Credit Units: 4

Course Objective:

To familiarize student with advance building materials and their construction details.
Learning construction details of various building parts at advanced level.

Course Contents:

Module I: Surfaces& Partitions- Construction Details

Construction details of Wall Murals, LED lit Glass/Acrylic Flooring and other surfaces. Detailing of lattice work partitions in different types of material like wood, Stone, etc. Understanding techniques like laser cutting, Water jet cutting and other methods used for different types of surface development.

Module II: False Ceiling & Lighting- Construction Details

Construction details of Ceiling with material specification, type and estimation. Types of lighting fixtures and enlarged details with electrical layout. Ceiling & Lighting details in bars and discotheques, hospitality spaces, auditoriums.

Module III: Advanced Furniture details

Working drawing of Work Stations in offices, living room furniture, bedroom furniture, Dining tables and storage units like Wardrobes, Crockery Unit, TV Unit, Chest of drawers, Bar Counter and Storage Unit detailed drawings .

Module IV: Toilet Details- Construction Details

Working drawing for toilets with type of Flooring and Flooring pattern, Wall Tiling and Pattern, Sanitary ware detailed layout with complete fixtures for e.g. Walk in Showers, Jacuzzi, Bath Tubs, different types of commode and washbasins, etc . Waterproofing of Toilet. Plumbing and Electrical diagrams.

Module V: Kitchen Details- Residential & Hospitality

Working drawing of Kitchen with detailing of Shelves & Cupboards along with hardware fixtures such as Handles and Hinges. Modular Kitchen Details using accessories provided by companies like Godrej Interiors, IFB, Hacker, KAFF, etc. Estimation and Specification of materials and labour. Plumbing and Electrical diagrams.

Examination Scheme:

Components	A	C	P	H	S	CT	EE
Weightage (%)	05	05	05	05	10	20	50

Text & References:

- Building construction W.B.McKay
- Building construction R Berry
- Building construction Chudley
- Building construction Francis D.K. Ching
- Design of Steel Structure, Negi
- Structure in Architecture, Salvadori and Heller.

PROJECT (THESIS)

Course Code: BID 802

Credit Units: 12

Course Objective:

To provide the students an opportunity to research and develop a design scheme for a project of their choice and approved by the school maintaining professional working standards and attain a professional level approach with extensive details. To attain independent professional approach analysis based design projects achieving high level of workability, efficiency and aesthetics in 3-D form with all the services properly worked out.

Course Contents:

Module I: Introduction

Introduction to the thesis design and get the project approved with the finalization of thesis guide/s. (Consent to be taken from internal and external guide both). The project research should include the followings:

Aim and Objective of study and Justification to topic selected	Case studies selected	Suggestions
Methodology of research	Analysis of study	Concept and planning of your own design
Limitation and scope of research	Conclusions of study	Bibliography

Module II: Research

Extensive research specific to project through the primary and secondary data collection. Conduct the case studies with extensive study and analyze to get a clear picture of the existing example. Detailed site study is to be conducted simultaneously.

Module III: Concept Development and Designing

Development of concept at various stages and levels with conceptual model and 3-D sketches to be studied. Design to be developed through a series of appraisals and open discussions. Planning at site as well as building level to be frozen and workability, efficiency of design to be worked out and finalized.

Module IV: Specifications and Estimation

The project estimation with all the necessary specifications to be detailed and studied to get a clear picture of the cost of the project. The details should include all the interior and exterior details.

Module V: Presentation

Complete project development and analysis report to be compiled containing all the details of the project. Presentation in terms of 3-D drawings and detailed Model to be submitted. Mode of presentation may be mutually devised by co-coordinators and student that may be project specific.

Examination Scheme:

Components	A	P	S	External Jury/Viva
Weightage (%)	05	25	20	50

The thesis project to be evaluated through open jury comprise of thesis guide and external expert members.

Text & References:

Text:

- Design Fundamental in Architecture, Walter Gropius
- Interior Best Collection, Commerce Asia II, Archiworld
- Interior Design- Ahmed Kasu
- Interior Design Illustrated - Francis D.K. Ching
- Time Saver standards for Interior Designing and Space Planning , Joseph Dechiara and [Julius Panero](#)

References:

- A.J. Metric Handbook, editors, Jan Bilwa and Leslie Fair weather
- Neufert's Architect's data
- Time Saver standards for building types, editor Joseph D.C. and John Callender.

Course Objectives: The primary focus of this course is the study of natural and electric lighting in an architectural context. The course promotes the integration of occupant comfort, energy efficiency and daylight availability throughout the design process and places an emphasis upon the role light can play in shaping architecture. Students will learn a series of design techniques from rules of thumb and simulations to high dynamic range photography and physical model building. Throughout the course students will work in groups and apply these techniques to a semester long course project. The course projects will be determined in discussion with the instructor.

Course Contents

Module 1: Introduction to lighting

Physics of lighting, direct, diffused and reflected, transmittance and reflectance, inverse square law. Photometric quantities: Intensity, flux, luminance, Luminance. Quality of light: direct and reflected glare, visual efficiency: visual acuity, contrast sensitivity, visual performance. Colour fundamentals: colour temperature, object colour, reactions to colour, chromaticity, colour rendering index. Light sources: basic characteristics, selecting an appropriate light source, comparison of natural and artificial light

Module 2: Day lighting

Daylight sources: characteristics, standard overcast sky (Design sky), clear sky, partly cloudy sky. Daylighting design: opportunities, human factors, site strategies, aperture strategies (sidelighting and toplighting), specialized daylighting strategies-galleries, atria, light-pipe and shafts. Daylight factor: components, calculation as Bureau of Indian Standard methods. Control devices: conventional divisions, optical division, prismatic division, awnings, curtains, overhangs, light shelves, sills, fins, jalis, louvers and shutters, photochromatic and film controls, prismatic glass, special highperformance glasses inbuilt louvers

Module 3: Electrical Lighting

Electric light sources: incandescent lamps, gaseous discharge lamps, fluorescent lamps, high intensity discharge lamps, other electric lamps-induction lamps, Light-Emitting Diodes, sulfur lamps and fiber optics. Electrical lighting design: lighting fixture distribution, mounting height, fixtures appraisals, coefficient of utilization, control, modular lighting design, general/ambient lighting, local/focus lighting, task lighting, layout. Prediction: average illuminance, horizontal illuminance by Lumen (Flux) method, illuminance at a point. Lighting control: switching, dimming, occupancy

Module 4: Lighting Technologies

Lighting Systems: Luminaries and Applications, Specifications, Lighting Documentation, RCP vs LTG Layouts, CAD drawings, Calculations, Daylighting, Electric Lighting,, Electric Lighting Luminaires, Directional Effects of Lighting, Light Distribution, Layers of Light, Residential Lighting Techniques, Office Lighting Techniques, Restaurant Lighting Techniques, Outdoor Lighting

Module 5: Lighting Applications

Symbols Guide, Codes and Compliance, Lighting Organizations, Competitions, Lighting by application, Lamps and Electrical Systems, Lighting Systems: Luminaries and Applications, Specifications, Lighting Systems: Controls and Electricity, future of lighting. Issues, challenges and opportunities in integration of electrical and natural light for built environment. Lighting art galleries, museum, residential, educational, commercial, industrial, buildings Special lighting applications: emergency lighting, floodlighting, street lighting, fiber optic lighting, hollow light guides, prismatic light guides, remote source lighting

Exercise: In order to develop a feeling for the physical quantities related to light and daylight, students will initially measure, simulate and evaluate the daylighting in a local space. Students will then build a massing model of their project

Examination Scheme:

Components	A	CE	CT	EE
Weightage (%)	05	25	20	50

Text & References

- Architectural Lighting by M. David Egan, Victor W. Olgyay
- Gordon, Gary; Interior Lighting for Designers; Wiley Publishing, 2003
- Flynn, John; Seegil, Arthur; Steffy, Gary; Architectural Interior Systems: Lightng/Acoustic/Air Conditioning; Van Nostrand Reinhold,
- Karlen, Mark; Benya, James; Lighting Design Basics; Wiley Publishing, 2004
- Russell, Sage; The Architecture of Light; ConceptNine, La Jolla, 2008.
- Schiler, Marc; Simplified Design of Building Lighting, Wiley, 1998, Steffey, Gary; Architectural Lighting Design, Wiley, 2008

Course Objective:

Technology is becoming inherent part of modern life and has invaded every aspect of our life including the building interiors. Intelligent interiors are one of the most important parts of the modern buildings and objectives of the course is to make students aware of the use of technology in interiors.

Course Contents:

Module I: Introduction

Overview of intelligent interiors and use of electronics & IT equipments for creating interesting interiors.

Module II: Intelligent Safety Systems

Use of technology to maximize the performance of fire alarms and security systems while at the same time minimizing costs. Incorporation of safety equipments such as CCTV etc aesthetically in the interiors

Module III: Workplace automation

Intelligence with respect to workplace automation in an intelligent interior consists of the use of high – tech office automation systems to render the operation of a company more efficient. This can be done at a reduced cost to tenants by virtue of the equipment being shared.

Module IV: Automation of interiors

Remote control in interiors, Managing and monitoring building efficiency from distance. Managing Security, HVAC etc from distance.

Module V : Virtual spaces and interiors

Learning ways & system of creating such spaces that change shape/ size/ ambience/ colour etc. to change according to performance & suite the audience- D/4D/6D interiors. Interiors to suit the model & behavior of the user. Right from ones entry to the building to reach his final destinations. Temperature, light and colour control.

Module VI: Intelligent use of energy

Intelligent interiors consist of energy use to the minimum with computerized system. To control light, airflow, air-conditioning, outdoor light entering the building heating and minimizing the energy consumption.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

Text:

- Drywall (Pro Tips for Hanging & Finishing), John D. Wagner
- Graphic Interiors (Space Designed by Graphic Artists), Corina Dean
- Interior design illustrated , Francis D.K. Ching
- Graphic Interiors (Space Designed by Graphic Artists), Corina Dean

References:

- A.J. Metric Handbook, Jan Bilwa and Leslie Fair weather
- Architectural Graphic standards, Boaz Joseph
- The Curtain Book, Mitchll Beazlty
- Illustration + Perspectives (In Pantone Colors), Eiji Mitooka

BID 805

SET DESIGN

Course Code: BID 805

Credit Units: 02

Teaching hours: 02

Course Objectives:

Set Design is an important and interesting section of design industry as it gives shape to ones' imagination and visualization. Set designing intends to expose students to different backgrounds and enhance designing skills by expressing ones' visualization into scenes. In this, students will be able to explore a new arena of employment

Module I: Orientation to the Set design

Introduction to set design, History of set designing, Materials and techniques, In sync of traditional set designing to contemporary sets. Case studies of classical & modern sets as submission of reports.

Module II: Application of set design

Practical use of Elements and principles of design in set Design, Presentation on different Film studios such as Ramoji film city, and Universal Studio/AUR Studio etc.

Module III: Workshop

Designing sets by using local low cost materials, designing artistic backdrops for various events held in college/ Students in groups designing sets such as News reports office, café.

Module IV : Virtual sets

Adoption of technology in design of sets, virtual sets. Incorporation of multimedia & modern gadgets within sets.

Module V : Modern set

Study of modern set, requirements for stage shows for different activities such as dances/ dramas/ plays/ solo and group performances/ reality shows/ discussion stage/ mobile & reusable stages. Understanding the equipments required and that aesthetic incorporation to enhance viewer pleasure.

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

- Drafting for the theatre- Dennis Dorn and Mark Shanda
- Light Fantastic: The Art and Design of Stage Lighting- Max Keller
- The Handbook of Set Design- Crowood Press
- Set Design by Tony Davis

Course Objective: To expose the students to the various theoretical and practical aspects of ergonomics and product design

Course Contents:

Module I: Ergonomics

Definition of human factors, Application of human factors data, Human activities – their nature and effects, man-machine system and physical environment.

Module II: Human control system

human performance and system reliability, information input and processing, , visual display, visual discrimination, Alphanumeric and related displays, visual codes and symbols, Auditory, tactual and olfactory mechanism, applied anthropometric, physical space and arrangement.

Module III: Product Design

Form, colour, symbols, user specific criteria; material, technology and recyclability; packaging; multiple utility oriented approach to product design; design of household elements, tools and devices; element design for the physically and mentally repaired. Creative thinking –creativity and problem solving- creative thinking methods- generating design concepts-systematic methods for designing –functional decomposition – physical decomposition – functional representation –morphological methods-TRIZ- axiomatic design

Module IV: Product Design Applications

Design Definitions and Design Spectrum, Product Attributes – Function and Emotion, Product configurations and Component relationships, Product Analysis – Diachronic, Synchronic, Understanding and Analyzing contexts, parallel situations, future situations, Understanding modularity and modular systems, 3D lattice and structures, Design of Modular System, abstract design, Process of conception and its documentation. Identifying customer needs, voice of customer, customer populations, hierarchy of human needs, need gathering methods – affinity diagrams – needs importance- establishing Product Design characteristics- competitive benchmarking- quality function deployment- house of quality- product design specification-case studies

Module V: Industrial application of Product Design

Industrial Product design, human factors design, user friendly design, design for serviceability, design for environment, prototyping and testing, cost evaluation, categories of cost, overhead costs, activity based costing methods of developing cost estimates, manufacturing cost, value analysis in costing

Exercise : Hands on Workshops on Product Design Studio, Case Studies on Product Design Development and Value Engineering

Examination Scheme:

Components	A	CE	CT	EE
Weightage (%)	05	25	20	50

Text & References:

Text:

- A-Level Product Design, Will Potts
- Materials and Design: The Art and Science of Material Selection in Product Design, Michael Ashby, Kara Johnson
- Human Factors in Product Design, W.S. Green
- Product Design: Graphics with Materials Technology, Lesley Cresswell

References:

- Creativity in Product Innovation, Jacob Goldenberg, David Mazursky
- Building Product Models, Charles M. Eastman
- Building Better Products with Finite Element Analysis, Vince Adams, Abraham Askenazi

Course Objective:

- To familiarize the student with cost-effective construction for building economy
- To develop an understanding of different issues, types and techniques involved in the design and construction of low cost structures

Course Contents:

Module I: Introduction

Basic shelter issues in India and Affordability, Need for achieving low costs in building construction – Low cost vs. Quality. Factors constituting building costs, Controlling parameters for achieving Cost Effective Architecture – land, space, materials, design, construction techniques, construction time & labour.

Module II: Understanding needs of economically weaker sections

Cultural study of economically weaker sections in India in different pockets like slums & existing EWS & LIG housings, space usage pattern studies, study for modifications and alterations done by dwellers in existing EWS & LIG Schemes.

Module III: Architectural Planning & Design for Cost Effective Architecture – Space Optimization

Site planning and Architectural Design as tools for Cost Effective Architecture, Space planning Norms of National Building Code, India for Economically weaker Sections in Urban and Rural Areas; National building organization – Recommendation of Housing and Urban Development Corporation, Space optimization as a process of cost reduction, Multiple use of space. Multiple use of furniture.

Module IV: Building Materials, Construction techniques & Time Optimization for Cost Effective Architecture

Local materials and traditional technologies, Improved traditional technologies, Innovative Materials and construction methods developed Laurie baker; CBRI Roorkee, HUDCO, Anangpur Building Centre, Development Alternatives, Auroville Building Centre and many others for different types of walling, roofing and foundation with materials like Pressed soil blocks, soil cement blocks and other alternative materials – fly ash brick, gypsum byproducts, Ferro cement products, bamboo, jute stalk etc; Ways to cut down the use of unwanted building materials, Project time optimization to reduce project costs, Use of effective project management techniques.

Module V: Studies and Comparative Analysis for Cost Effectiveness

Case studies presentations of low cost/ cost effective projects and their comparative cost analysis with conventional projects.

Examination Scheme:

Components	A	CE	CT 1	EE
Weight age (%)	05	25	20	50

Text & References:

- Alternative Construction, Contemporary Natural building Methods: Edited by Lynne Elizabeth and CassandrAdams.
- Low cost housing in developing countries by G. C. Mathur
- How the other half builds – Vol 1, 2 & 3 by Vikram Bhatt et al.
- National Building Code of India, 2005 – PART 3 – ANNEX C, E & F
- Laurie Baker – Life, work, writings by Gautam Bhatia
- Low Cost Housing – An analytical Study of the current practices & techniques by Vastu Shilpa Foundation
- CBRI Publications – Book 1-9
- Low Cost Housing competitions 1974 – 96 by HUDCO
- How to reduce building costs by Laurie Baker

Course Objective:

To acquaint the students to Prefabrication in construction, industrialized construction and design of prefabricated elements. To familiarize the students with construction method/ techniques used for these elements in building works.

Course Contents:**Module I: Introduction**

Need for prefabrication, advantages and disadvantages of prefabrication, Principles, Materials, Modular coordination, Standardization, Systems, Production, Transportation and Erection.

Module II: Prefabricated Components

Behavior of structural components, Large span constructions, Construction of roof and floor slabs, Wall panels, Columns, Shear walls.

Module III: Design Principles

Disuniting of structures - Design of cross section based on efficiency of material used – Problems in design because of joint flexibility – Allowance for joint deformation.

Module IV Joint In Structural Members

Joints for different structural connections – Dimensions and detailing – Design of expansion joints. Basic Construction and fixing details used for various prefabricated panel/ elements, their applications, types, pricing, advantages & disadvantages

Module V: Design For Abnormal Loads

Progressive collapse – Code provisions – Equivalent design loads for considering abnormal effects such as earthquakes, cyclones, etc., – Importance of avoidance of progressive collapse.

Examination Scheme:

Components	A	CE	CT 1	EE
Weightage (%)	05	25	20	50

Text & References:

Text:

1. CBRI, Building materials and components, India, 1990
2. Gerostiza C.Z., Hendrikson C. and Rehat D.R., “Knowledge based process planning for construction and manufacturing”, Academic Press Inc., 1994

References:

1. Koncz T., “Manual of precast concrete construction”, Vol. I, II and III, Bauverlag, GMBH, 1976.
2. “Structural design manual”, Precast concrete connection details, Society for the studies in the use of precast concrete, Netherland Betor Verlag, 2009

BCS 801 COMMUNICATION SKILLS - V Course

Code: BCS 801 Credit Units: 01

Teaching hours: 01

Course Objective:

To facilitate the learner with Academic Language Proficiency and make them effective users of functional language to excel in their profession.

Course Contents:

Module I

Introduction to Public Speaking

Business Conversation

Effective Public Speaking

Art of Persuasion

Module II: Speaking for Employment

Types of Interview

Styles of Interview

Facing Interviews-Fundamentals and Practice Session

Conducting Interviews- Fundamentals and Practice Session

Question Answer on Various Dimensions

Module III

Resume Writing

Covering Letters

Interview Follow Up Letters

Module IV: Basic Telephony Skills

Guidelines for Making a Call

Guidelines for Answering a Call

Module V: Work Place Speaking

Negotiations

Participation in Meetings

Keynote Speeches

Examination Scheme:

Components	CT1	CT2	CAF	V	GD	GP	A
Weightage (%)	20	20	25	10	10	10	5

CAF – Communication Assessment File

GD – Group Discussion

GP – Group Presentation

Text & References:

- Jermy Comfort, Speaking Effectively, et.al, Cambridge
- Krishnaswamy, N, Creative English for Communication, Macmillan
- Raman Prakash, Business Communication, Oxford.
- Taylor, Conversation in Practice,

Course Objective:

This course aims at enabling students towards:

- Understand the importance of individual differences
- Better understanding of self in relation to society and nation
- Facilitation for a meaningful existence and adjustment in society
- Inculcating patriotism and national pride

Course Contents:

Module I: Individual differences & Personality	Personality: Definition & Relevance Importance of nature & nurture in Personality Development Importance and Recognition of Individual differences in Personality Accepting and Managing Individual differences Intuition, Judgment, Perception & Sensation (MBTI) BIG5 Factors
Module II: Managing Diversity	Defining Diversity Affirmation Action and Managing Diversity Increasing Diversity in Work Force Barriers and Challenges in Managing Diversity
Module III: Socialization	Nature of Socialization Social Interaction Interaction of Socialization Process Contributions to Society and Nation
Module IV: Patriotism and National Pride	Sense of pride and patriotism Importance of discipline and hard work Integrity and accountability
Module V: Human Rights, Values and Ethics	Meaning and Importance of human rights Human rights awareness Values and Ethics- Learning based on project work on Scriptures like- Ramayana, Mahabharata, Gita etc.
Module VI: End-of-Semester Appraisal	Viva based on personal journal Assessment of Behavioral change as a result of training Exit Level Rating by Self and Observer

Examination Scheme:

Components	SAP	A	Mid Term Test (CT)	VIVA	Journal for Success (JOS)
Weightage (%)	20	05	20	30	25

Text & References:

- Davis, K. Organizational Behaviour,
- Bates, A. P. and Julian, J.: Sociology - Understanding Social Behaviour
- Dressler, David and Cans, Donald: The Study of Human Interaction
- Lapiere, Richard. T – Social Change
- Lindzey, G. and Borgatta, E: Sociometric Measurement in the Handbook of Social Psychology, Addison – Welsley, US.
- Rose, G.: Oxford Textbook of Public Health, Vol.4, 1985.
- Robbins O.B. Stephen;. Organizational Behaviour

Course Objective:

Revise the portion covered in the first volume, give proper orientation in communication and culture.

Course Contents:

Module A: Unités 1 – 3 : pp. 06 - 46

Contenu lexical :

Unité 1: Rédiger et présenter son curriculum vitae

Exprimer une opinion

Caractériser, mettre en valeur

Parler des rencontres, des lieux, des gens

Unité 2: Imaginer - Faire des projets

Proposer - conseiller

Parler des qualités et des défauts

Faire une demande écrite

Raconter une anecdote

Améliorer son image

Unité 3: Exprimer la volonté et l'obligation

Formuler des souhaits

Exprimer un manque/un besoin

Parler de l'environnement, des animaux, des catastrophes naturelles

Contenu grammatical:

1. Le passé : passé composé/imparfait
2. Pronoms compléments directs/indirects, y/en (idées/choses)
3. Propositions relatives introduites par qui, que, où
4. Comparatif et superlatif
5. Le conditionnel présent
6. Situer dans le temps
7. Féminin des adjectifs
8. La prise de paroles : expressions
9. Le subjonctif : volonté, obligation

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- le livre à suivre: Campus: Tome 2

Course Objective:

To enable the students to converse, read and write in the language with the help of the basic rules of grammar, which will later help them to strengthen their language.

To give the students an insight into the culture, geography, political situation and economic opportunities available in Germany. Introduction to Advanced Grammar and Business Language and Professional Jargon

Course Contents:

Module I: Dass- Sätze

Explain the use of the conjunction “-that”, where verb comes at the end of the sentence

Module II: Indirekte Fragesätze

To explain the usage of the “Question Pronoun” as the Relative Pronoun in a Relative Sentence, where again the verb falls in the last place in that sentence.

Module III: Wenn- Sätze

Equivalent to the conditional “If-” sentence in English. Explain that the verb comes at the end of the sentence.

Module IV: Weil- Sätze

Explain the use of the conjunction “because-” and also tell that the verb falls in the last place in the sentence.

Module V: Comprehension texts

Reading and comprehending various texts to consolidate the usage of the constructions learnt so far in this semester.

Module VI: Picture Description

Firstly recognize the persons or things in the picture and identify the situation depicted in the picture;

Secondly answer questions of general meaning in context to the picture and also talk about the personal experiences which come to your mind upon seeing the picture.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Wolfgang Hieber, Lernziel Deutsch
- Hans-Heinrich Wangler, Sprachkurs Deutsch
- Schulz Griesbach, Deutsche Sprachlehre für Ausländer
- P.L Aneja, Deutsch Interessant- 1, 2 & 3
- Rosa-Maria Dallapiazza et al, Tangram Aktuell A1/1,2
- Braun, Nieder, Schmöe, Deutsch als Fremdsprache 1A, Grundkurs

Course Objective:

To enable students acquire working knowledge of the language; to give them vocabulary, grammar, expressions used on telephonic conversation and other situations to handle everyday Spanish situations with ease.

Course Contents:

Module I

Revision of earlier semester modules

Module II

Zodiac signs. More adjectives...to describe situations, state of minds, surroundings, people and places.

Module III

Various expressions used on telephonic conversation (formal and informal)

Module IV

Being able to read newspaper headlines and extracts (Material to be provided by teacher)

Module V

Negative commands (AR ending verbs)

Module VI

Revision of earlier sessions and introduction to negative ER ending commands, introduction to negative IR ending verbs

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Español En Directo I A, 1B
- Español Sin Fronteras
- Material provided by the teacher from various sources

FLJ 801

JAPANESE - VII

Course Code: FLJ 701

Credit Units: 02

Teaching

hours: 02

Course Objective:

To enable the students to converse in the language with the help of different speech, possibilities, probabilities etc.

Note: The teaching is done in roman as well as Japanese script. 10 more kanjis (Japanese characters) are taught in this semester.

Course Contents:

Module I: Thought

Expressing one's thought and intentions on different situations.

Module II: Advice

Giving advice, probability, possibility and suggestions.

Module III: Informal Speech

Addressing friends and close people using informal ways.

Module IV: Simultaneous Verbs

Describing two situations simultaneously.

Module V: Possibility

Explaining the probability and possibility of any situation.

Learning Outcome

▲ Students can interact in a formal as well as informal way on above-mentioned topics.

Methods of Private study/ Self help

▲ Hand-outs, audio-aids, assignments and role-plays will support classroom teaching.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- Shin Nihon-go no Kiso Lesson No.-31 to 35.
- All vocabulary and topics taught to the students are from the above mentioned book.

Course Objective:

The story of Cinderella first appears in a Chinese book written between 850 and 860 A.D. The course aims at familiarizing the student with the basic aspects of speaking ability of Mandarin, the language of Mainland China. The course aims at training students in practical skills and nurturing them to interact with a Chinese person.

Course Contents:

Module I

Drills

Dialogue practice

Observe picture and answer the question.

About china part – I Lesson 1, 2.

Module II

Pronunciation and intonation

Character Writing and stroke order.

Module III

Ask someone what he/she usually does on weekends?

Visiting people, Party, Meeting, After work....etc.

Module IV

Conversation practice

Translation from English to Chinese and vice-versa.

Short fables.

Module V

A brief summary of grammar.

The optative verb “yuanyi”.

The pronoun “ziji”.

Examination Scheme:

Components	CT1	CT2	C	I	V	A
Weightage (%)	20	20	20	20	15	5

C – Project + Presentation

I – Interaction/Conversation Practice

Text & References:

- “Kan tu shuo hua” Part-I Lesson 1-7