

# CENTRE FOR DESIGN EXCELLENCE

## Bachelor of Design (B.Des.) Detailed Syllabus for Semester II



### **Vivekananda Global University, Jaipur**

(Established by Rajasthan State Legislature vide Act. No. 11/2012 and covered u/s 2(f) of UGC Act 1956)

# Syllabus for B.Des.



# VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

## EXAMINATION SCHEME FOR BACHELOR OF DESIGN

### B.DES

#### Semester-II

(Wef. 10 Aug 2018, Batch 2018 - 2019)

S.No	Subject code	Subject Title	Teaching Hours			Total Hours	Credit	ET-Exam Duration (Hours)	Internal Marks	External Marks
			Lecture	Tutorial	Practical					
1.	BDFS 201	Design thinking & Process	2	0	2	4	5	3	50	50
2.	BDFS 202	The Making – Design Project I	2	2	2	6	6	-	50	50
3.	BDFS 203	Evolution of Art & Design	1	1	1	3	3		50	50
4.	BDFS 204	Environmental Science - I	1	2	-	3	2	2	50	50
5.	BDFS 205	Technical Drawing (Manual + Computer) - II	1	1	3	5	6	3	50	50
6.	BDFS 206	Advanced Documentation and Presentation skills	1	1	1	3	3	-	50	50
7.	BDFS 207	Material and Workshop Practices - II	1	-	2	3	4	-	50	50
<b>Total</b>			<b>09</b>	<b>07</b>	<b>11</b>	<b>27</b>	<b>28</b>	<b>-</b>	<b>350</b>	<b>350</b>

**Note:**

1. Theory Examination (TE): Theory exam shall be conducted for Evolution of Design Style (BDFS 203) and Environmental Science - I (BDFS 204).
2. Theory and Drafting Examination (TDE): Writing and Drafting exam shall be conducted for the studio subjects of Design Thinking and Process (BDFS 201), Technical Drawing (Manual + Computer) - II (BDFS 205) in the Studio hall having the provisions of drawing boards.
3. Sessional Viva-Voce Examination (SVE): Portfolio examination (as Practical exam)/ Presentation shall be conducted through viva-voce in the subject of The Making – Design Project I (BDFS 202), Advanced Documentation and Presentation skills (BDFS 206) and Material and Workshop Practices - II (BDFS 207), by internal / external examiner

<b>BDFS 201 Design Thinking &amp; Process</b>		
<b>Course No.: BDFS 201</b>	<b>Course Title: Design Process and Concepts (Design Thinking)</b>	<b>Credit: 5 L-T-P : 2-0-2</b>
<b>Exam Duration: 3 hr</b>	<b>Exam : Theory and Drafting Examination (TDE)</b>	<b>Max Marks: 100</b>

**OBJECTIVE:**

The design process helps the designers to involve clients and users in meaningful ways. It is not just a strategy to come up with feasible solutions to a problem but also a method to think of unimaginable solutions and trying to make them not just feasible, but also viable.

It should create a blend of logic, powerful imagination, systematic reasoning and intuition to bring to the table the ideas that promise to solve the problems related to the design with desirable outcomes. It should also help to bring creativity with business insights.

**CONTENTS:**

**Unit 1: Empathize:** Understanding Empathy; User stories; Interpretive research.

**Unit 2: Define;** Problem Definition; Visual representation of problem statements; contextualization and validation of a problem set;

**Unit 3: Ideate;** Scenario Building; Mapping solutions.

**Unit 4: Prototype;** Reflection of the learning's from different ideas, Fitting in; Building a real prototype to understand.

**Unit 5: Test;** Testing of prototype with actual users, until it solves the real problem; Concept Detailing of the final idea; Study boards, finalizing of the final outcome.

**Suggested Readings:**

- John Thackara, In the Bubble: Designing in a Complex World, The MIT Press, 2005
- Bruce Hanington, Bella Martin, Universal Methods of Design: 100 Ways to Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions, Rockport Publishers, 2012
- Donald A. Norman, Living with Complexity, MIT Press, 2010
- Jeffrey Whitten and Lonnie Bentley, Systems Analysis and Design Methods, McGraw-Hill/Irwin, 2005
- Gerald M. Weinberg and Daniela Weinberg, General Principles of Systems Design, Dorset House, 1988

<b>BDFS 202 The Making – Design Project I</b>		
<b>Course No.: BDFS 202</b>	<b>Course Title: The making – Design Project</b>	<b>Credit: 6 L-T-P : 2-2-2</b>
<b>Exam Duration: -2 hrs</b>	<b>Exam : Sessional Viva-Voce Examination (SVE)</b>	<b>Max Marks: 100</b>

**OBJECTIVE:**

The core objective of this project is to facilitate students to explore and learn through various problem and opportunities available in the real world scenario and provide relevant solution of opportunities within the problem.

**CONTENTS:****UNIT-1:**

Introduction to Design Project, Opportunity identification through empathy, analysis of user behavior, brainstorming, design brief formation & project formation.

**UNIT-2 :**

Making of design brief, brain mapping, trend & forecasting study, board building (Mood board, User board, Client board, Market Board, Concept Board) Ideation, conceptualization, process study, Concept model making & working drawings.

**UNIT-3 :**

Concept refinement & user feedback, final working drawing, Development of product scenarios.

**UNIT-4 :**

Production Processes and Final Prototyping.

**UNIT-5 :**

Estimation, Costing & pricing, market test, users feedbacks & project documentation.

**EXERCISES:**

Design and execution of a scaled final product, which should be ready to use by the respective user.

**VISITS:**

Related case studies virtually online or locally, nationally or internationally through academic tour.

**Suggested Readings:**

The Design Process	Aspelund. K.	2010	New York, Fairchild Books.
You can find inspiration in everything, if you can't, look again	Smith, Petal.	2014	U.K.,Violette Editions.

<b>BDFS 203 Evolution of Art &amp; Design</b>		
<b>Course No.: BDFS 203</b>	<b>Course Title: Evolution of Art and Design</b>	<b>Credit: 3 L-T-P : 1-1-1</b>
<b>Exam Duration: -</b>	<b>Exam : Theory Examination (TE)</b>	<b>Max Marks: 100</b>

**Objective:**

The core objectives of this module is to facilitate you to explore and learn about History of Art and design, Different art and design movements, Modern and contemporary art & design world. Understanding of Indian and western esthetics and its application in art and design.

**Unit 1.** Introduction to the history of Art and design from Prehistoric era to the modern world (Stone Age, Mesopotamian, Egyptian, Greek and Hellenistic, Roman, Indian, Chinese, and Japanese, Byzantine and Islamic, Middle Ages.

**Unit 2.**

European art and design movements, Early and High Renaissance, Venetian and Northern Renaissance, Mannerism, Baroque, Neoclassical, Romanticism, Realism, Impressionism, Post-Impressionism, Fauvism and Expressionism.

**Unit 3.**

Modern and contemporary art & design world, Cubism, Futurism, Suprematism, Constructivism, Dada and Surrealism, Abstract Expressionism, Postmodernism and Deconstructivism.

**Unit 4.**

Indian Schools of arts and Crafts, Rajput and Mughal Empire.

**Unit5.**

Understanding of Indian and western aesthetics, Aesthetics and its application in art and design.

**EXERCISES**

Documentation tools- mapping, photography, sketching etc., Interviews and report writing on experiences and discussions.

**Suggested Readings:**

1.	MODERN ART		H.H.Arnason, Elizabeth Mansfield	
2.	<u>Indian Art (Oxford History of Art)</u> (Paperback)	Oxford university press	<u>ParthaMitter</u>	2001
3.	<u>Gardner's Art through the Ages: A Concise Wes...</u> (Paperback)		<u>Fred S. Kleiner</u>	
4.	A History of Far Eastern Art	Thames & Hudson	<u>Sherman E. Lee</u>	
5.	Oriental Architecture / 2: China, Korea, Japan (History of World Architecture)		Mario Bussagli	1989

<b>BDFS 204 Environmental Science 1</b>		
<b>Course No.: BDFS 104</b>	<b>Course Title: Environmental Science 1</b>	<b>Credit: 3 L-T-P : 1-2-0</b>
<b>Exam Duration: 3 hr</b>	<b>Exam : Theory Examination (TE)</b>	<b>Max Marks: 100</b>

**OBJECTIVE:**

This programme focuses on the developing role of the designer in the context of the environment. In recent decades, our experience of space and place has been radically transformed. Across the globe, populations are on the move, with people traveling further and more frequently than at any point in history.

**CONTENTS:****Unit-1- Introduction;**

Definition and origin of ecology its fundamental concept, major divisions and relation with Design & Environment. Definition of environment, Interaction among ecological factors – light & temperature, precipitation, humidity, gases/wind, topography.

**Unit-2 - Climate And Human Comfort**

Components of climate and their influence on human body, Climate classifications for building designers in tropics, Human comfort parameters.

**Unit-3 - Climate and Design**

Passive Design strategies .Climate responsive design exercises for various contexts

**Unit-4– Case Study on Ecosystem;**

Kinds of ecosystem – natural and artificial, Structure, function and energy flow of ecosystem.

**Unit-5 - Global Environmental Issues;**

Global warming & climate change, Loss of bio-diversity, Desertification, Deforestation.

**Suggested Readings:**

- Sharma P.D., “Ecology and Environment”, Rastogi Publications, Meerut, India.
- Perlman, D. and Mielder, J., “Practical Ecology for Planners Developers and Citizens”, Island Press.
- Platt, R.H., “The Ecological City: Preserving and Restoring Urban Bio diversity”, N.Y.Academy of Sciences.
- Register, R., “Ecocities: Building cities in balance with Nature”, New Society Publishers.
- Todd, N.J. and Todd, J., “Principles of Ecological Designs”, North Atlantic Book.
- Voula, M., “Sustainable Development, Energy and the city: A Civilization of Concepts and Actions”,Elsevier.

<b>BDFS 205 Technical Drawing (Manual + Digital) - II</b>		
<b>Course No.: BAR 205</b>	<b>Course Title: Technical Drawing (Manual + Computer) - II</b>	<b>Credit: 6 L-T-P : 1-1-3</b>
<b>Exam Duration: 3 hr</b>	<b>Exam : Theory &amp; Drafting Examination (TDE)</b>	<b>Max Marks: 100</b>

**OBJECTIVE:**

- Ability to quickly visualize ideas.
- Ability to do visual design explorations.
- Ability to create compelling visuals of ideas before they come to reality for every stakeholder's proper understanding.

**CONTENTS:****Unit1: Geometry and Surface Development**

Construction of geometric solids Tessellations and surface development.

**Unit 2: Graphical Representation of Forms**

Isometric view of objects and interior spaces. Basic Pattern Drafting.

**Unit 3: Study of Light and Shadow**

Interaction with light, highlights, shadow and reflection study of objects; construction of sciography of simple objects in plan and elevation.

**Unit 4: Digital Representation**

Technical Representation through Auto-CAD

**Unit5: Software Skills**

Digital illustration technique using software Photoshop and coral draw

**EXERCISES:**

- Drawing Sheets- making formats and formal composition for graphical representation.
- Drafting exercise related to above topics.

**Suggested Readings:**

- Rendow yee : architectural drawing, a visual compodium of types and methods
- D.k.ching : Form space and order
- Gill : rendering with pen and ink
- N.d.bhatt ; engineering drawing
- Tom Porter ,Design Drawing techniques for architects, graphic designers and artists, Oxford Architectural Press,1991 Terence ed .Dalley, The complete guide to illustration & design, Phaidon, Oxford, 1980 T. C. Wang, Pencil Sketching, John Wiley & Sons,1997



<b>BDFS 206 Advance Documentation and Presentation Skills</b>		
<b>Course No.: BDFS 206</b>	<b>Course Title: Advance Documentation and Presentation Skills</b>	<b>Credit: 3 L-T-P : 1-1-1</b>
<b>Exam Duration: 2 hr</b>	<b>Exam : Sessional Viva-Voice Examination (SVE)</b>	<b>Max Marks: 100</b>

**OBJECTIVE:**

The objectives of this subject is to provide students a learning opportunity of effective professional documentations and presentation skills.

**CONTENTS:****Unit 1: Documentation and Research Techniques**

Introduction to the various documentation and researching techniques, introduction to various tools and medium of presentation.

**Unit 2: Font & Graphics**

Different types of documents style, fundamental role of various font selections for different purposes, graphic design. Playing with various fonts and formats .

**Unit 3: Data collection & Photography**

Understating of data collection skills and techniques, role of effective photography for a specific data and purposes.

**Unit 4: Layout & Grid**

Introduction to various Layouts and grids their uses in print media. Exploring new possibilities in layout formation. Development of presentation files.

**Unit 5: Documentation & Presentation**

Development of innovative approach to documentation and presentation. Documenting previous work in a form of book, making presentation of each subject learning.

**EXERCISE:**

The exercise would be integrated with the compilation of previous design project and subject assignment.

**Suggested Readings:**

- Griffin, E. (2012). A first look at communication theory (8 th ed.). New York: McGraw-Hill.
- Lewis, J. (2002). Cultural studies: The basics. London: SAGE Publications.
- Watson, J. (1985). What is communication studies?. London: Edward Arnold.
- Berko Roy (1989) Basically Communicating .Wm. C. Brown Publishers
- Roloff, M. E., & Miller, G. R. (1987). Interpersonal processes: New directions in communication research. Newbury Park.

<b>BDFS 207 Material &amp; Workshop Practices II</b>		
<b>Course No.: BDFS 207</b>	<b>Course Title: Material and Workshop Practices II</b>	<b>Credit: 4 L-T-P : 1-0-2</b>
<b>Exam Duration: 2 hr</b>	<b>Exam : Sessional Viva-Voice Examination (SVE)</b>	<b>Max Marks: 100</b>

**OBJECTIVE:**

The core objectives of this module is to facilitate you to explore and research about various materials and processes through hands-on learning experiences.

**CONTENTS:****Unit 1: Wood**

Researching about wood and Wood working techniques, development of Advance Joinery (Corner Joints)

**Unit 2: Ceramics and Pottery**

Researching about clay and ceramic exploring various properties, Processes and use of ceramics and clay.

**.Unit 3: Metal**

Researching about Metal, exploring various properties, processes and uses. Working with metal casting technique (Sand/Lost wax)

**Unit 4: Fibers and Fabric**

Exploring various natural and synthetic fibers available in the environment. Constructing them to create a fabric.

**Unit 5:****Plastics & synthetic materials**

Researching about Various plastics and synthetic materials , exploring their various properties, processes and uses. Working with metal casting technique (Sand/Lost wax)

**EXERCISES:**

- Notes and tutorials on Properties of Materials
- Market survey, sample collection and Industrial Knowledge ; availability of materials
- Sketching Exercises on use of Various materials and their Art work Designs.

**VISITS:**

- Material markets.
- Plywood Industry etc.
- Diffrent workshops

**Suggested Readings:**

- J. Garratt, Design and Technology, Cambridge University Press, UK, 20004
- R. Thompson, Manufacturing processes for design professionals, Thames & Hudson, London 2007
- Michael Ashby and Kara Johnson, Materials and Design: The Art and Science of Material Selection in Product Design, Butterworth Heinemann, 2002