Deccan Education Society's

FERGUSSON COLLEGE, PUNE
(AUTONOMOUS)

SYLLABUS UNDER AUTONOMY

FIRST YEAR B.Sc.
SEMESTER - I

SYLLABUS FOR F.Y. B.Sc. ANIMATION

Academic Year 2016-2017

Deccan Education Society's
FERGUSSON COLLEGE, PUNE 411004
Scheme of Course Structure (Faculty of Science)

Department: <u>Animation</u>

Particulars	Code	Title of Paper	No. of Credits
F.Y. B.Sc. Semester I	ANI1101	Fundamentals of Computer	2
	ANI1102	Introduction to C Programming Languages	2
	ANI1103	Basics of Animation	2
	ANI1104	Visual Art	2
	ANI1105	Computer Based 2D Animation	2
	ANI1106	Introduction to Graphics	2
	ANI1107	Elements of 3D Design	2
	ANI1108	Introduction to Communication Studies	2
	ANI1109	Animation Practical - I	2
	ANI1110	Animation Practical - II	2
	ANI1111	Animation Practical - III	2
	ANI1112	Animation Practical - IV	2
			2
F.Y. B.Sc. Semester II	ANI1201	Introduction to Information Technology	2
	ANI1202	Object to Orientated Programming using C++	2
	ANI1203	Traditional 2D Animation	2
	ANI1204	Foundation Art	2
	ANI1205	Advance Computer Based 2D Animation	2
	ANI1206	Digital Art	2
	ANI1207	3D Design	2
	ANI1208	Introduction to Media	2
	ANI1209	Animation Practical - V	2
	ANI1210	Animation Practical - VI	2
	ANI1211	Animation Practical - VII	2
	ANI1212	Animation Practical - VIII	2

ANI1101 Fundamentals of Computer

Objective:

To give you a general understanding of how a computer works. Introduce you to assembly level programming

Prepare you for future courses.

At the end of the course you'll be able to: Describe the fetch execute cycle of a computer Understand the different types of information which may be stored within a computer memory. Write a simple assembly language program.

PAPER CODE: AN1101		
PAPER - I: Fundamentals of Computer		
[Credit - 2: No. of Lectures 36]		
	Fundamentals of Computer	**No. of Lectures**
Unit - I	Introduction	6
Unit - II	Basic Computer organization	5
Unit - III	Number Systems	8
Unit - IV	Processor and Memory	6
Unit - V	Secondary Storage Devices	8
Unit - VI	Input-Output Devices	8
References:		
1. Computer Fundaments By Pradeep K. Sinha & Priti sinha , sixth Edition (BPB Publication)		
2. Fundamentals of Computers by V. Rajaraman		

ANI1102 Introduction to C Programming Languages

Objective:
The course fully covers the basics of programming in the "C" programming language and demonstrates fundamental programming techniques, customs and vocabulary including the most common library functions and the usage of the preprocessor. Also To familiarize the Students with basic concepts of computer programming and developer tools. To present the syntax and semantics of the "C" language as well as data types offered by the language. & allow the Students to write their own programs using standard language infrastructure regardless of the hardware or software platform.

PAPER CODE: ANI1102
PAPER - II: Introduction to C Programming Languages
[Credit - 2: No. of Lectures 36]

	Introduction to C Programming Languages	No. of Lectures
Unit - I	Introduction to C	8
Unit - II	Control Structures	14
Unit - III	Functions in C	8
Unit - IV	Arrays, pointers and structures	10
Unit - V	Introduction OOP	8

References:
1. Object Oriented Programming with C++ - E. BALAGURUSWAMY
2. Let us C By Yashwant Kanitkar

ANI1103 Basics of Animation

Objective:
Students will study animation using the following perspectives: historical, aesthetic, technological, cultural, and social. This course will cover classic film animation from around the world. There is the obvious global connection that comes from the study of animation history around the world. In our country animation is most often used for entertainment, but in other countries it has served a much different purpose.

PAPER CODE: ANI1103
PAPER - III: Basics of Animation
[Credit - 2: No. of Lectures 36]

	Basics of Animation	**No. of Lectures**
Unit - I	History of Animation	4
Unit - II	Introduction to Animation	4
Unit - III	Terms used in Animation	6
Unit - IV	Types of Animation	4
Unit - V	Skills for Animation Artist	4
Unit - VI	Basic Principles of Animation	6
Unit - VII	Animator's Drawing Tools	4
Unit - VIII	Rapid Sketching & Drawing	4

References:
1. The Complete Animation course by Chris Patmore, By – Barons Educational Series (New York)
2. Anatomy of the Artist – Thompson & Thompson

ANI1104 Visual Art

Objective:
2D Design Foundations is a studio workshop addressing the elements and principles of design (line, color, shape, texture, space, form, value, unity, balance, variety, scale, proportion, rhythm, emphasis). Students are presented with visual problems to solve (by hand and digitally) on a weekly basis that relate to lecture topics. Students should view their participation in this course as a time to acquire foundational skills, develop visual curiosity, research, and experiment.

PAPER CODE: ANI1104
PAPER - IV: Visual Art
[Credit - 2: No. of Lectures 36]

	Visual Art	**No. of Lectures**
Unit - I	Skills required for an Animation Artist	4
Unit - II	Introduction to Colors	6
Unit - III	Introduction to Visual Design	10
Unit - IV	Principles of design	10
Unit - V	Introduction to Design	6

References:
1. Figure Study Made Easy By - Aditya Chari -- Grace Publication
2. Perspective By Milind Mulik -- Jyotsna Prakashan
3. Animal Anatomy for Artists – The Elements of Form – Eliot Goldfinger - Oxford University Press.

Links:
1. http://en.wikipedia.org/wiki/Color_theory
2. http://www.colormatters.com/color-and-design/basic-color-theory
3. http://en.wikipedia.org/wiki/Design_elements_and_principles
4. http://www.usability.gov/what-and-why/visual-design.html
5. http://en.wikipedia.org/wiki/Typography

ANI1105 Computer Based 2D Animation

Objective:
The course starts out with an introduction to the software, followed by a tour of the interface. Once you know your way around the numerous panels and menus, you'll start to learn the drawing modes and tools that allow you to create vector and raster images to animate. All students are encouraged to take their time and become comfortable with each aspect of Flash that is taught before moving on to frame-by-frame animations.

PAPER CODE: ANI1105
PAPER - V: Computer Based 2D Animation
[Credit -2: No. of Lectures 36]

	Computer Based 2D Animation	**No. of Lectures**
Unit - I	Overview of Flash	6
Unit - II	Introduction to the flash interface	4
Unit - III	Setting stage dimensions, working with panels, panel layouts	6
Unit - IV	Introduction to drawing and drawing tools in Flash	6
Unit - V	Panels - Description , modifying , Saving & deleting a panel	6
Unit - VI	Layers & Views	8

References:
1. Flash CS4 Professional Bible Published by Wiley Publishing
(Robert R & Snow D.)
2.FLASH MX For PC / Mac Published by – FIREWALL MEDIA – Laxmi Publications

ANI1106 Introduction to Graphics

Objective:
You'll learn the basics so that you can complete the most basic of tasks, but you'll also get the chance to delve into some advanced features. Whether you're a graphics designer or photographer, digital artist who wants to improve Photoshop skills – or a hobbyist who enjoys editing and manipulating images – you'll learn everything about Photoshop that you need to know.

PAPER CODE: ANI1106
PAPER - VI: Introduction to Graphics
[Credit - 2: No. of Lectures 36]

	Introduction to Graphics	**No. of Lectures**
Unit - I	Workspace	2
Unit - II	Preferences	3
Unit - III	Colors	2
Unit - IV	Introduction to Menus	4
Unit - V	Selecting	8
Unit - VI	Introduction to Menu - Layer	4
Unit - VII	Making color and tonal adjustments	7
Unit - VIII	Introduction to Types	2
Unit - IX	Menu – Filters	6

References:
1. Adobe Photoshop Bible cs5 by Lisa Danae Dayley, brad dayley --- Wiley india ISBN 13 - 9788126527199
2. Adobe Photoshop CS6 (Clasroom in a Book) ISBN – 978-81-317-9164-6 By PEARSON Publications

ANI1107 Elements of 3D Design

Objective:
This course introduces students to all the major features of 3ds Max: Introduction, Modelling, Texturing Rendering and popular workflow. Concepts are quickly reviewed and explained and then demonstrated using 3ds Max. Students will gain proficiency by following class examples as well as creating projects and exercises. The coursework is designed to make sure the student is exposed to all relevant aspects of CG creation with Maya with an eye toward giving the student a base foundation from which to explore and expand.

PAPER CODE: ANI1107
PAPER - VII: Elements of 3D Design
[Credit - 2: No. of Lectures 36]

	Elements of 3D Design	**No. of Lectures**
Unit - I	Concept of 3 Dimension	**2**
Unit - II	Introduction to 3ds max software	**2**
Unit - III	Interface of 3ds max	**2**
Unit - IV	Box (Inorganic) modelling	**10**
Unit - V	Character (Organic) modelling	**10**
Unit - VI	Texturing & unwrapping	**10**

References:
3ds Max - Introducing 3ds Max 2009 / 2012 / 2014 3D for Beginners by **DARIUSH**

ANI1108 Introduction to Communication Studies

Objective:

This course examines the sociological, economic and political effects of mass communications systems and media on our culture. We will examine communication theories and models, historical and contemporary research, the mass media industries, laws and regulations, and the effects of media on society.

PAPER CODE: ANI1108
PAPER - VIII: Introduction to Communication Studies
[Credit - 2: No. of Lectures 36]

	Introduction to Communication Studies	No. of Lectures
Unit - I	Mass Communication, culture & Media literacy	**18**
Unit - II	The Evolving Mass Communication Process	**18**

References:
1. Mass communication in India, By Keval J. Kumar
2. Mass Communication Theory by Denis Mcquail

	PAPER CODE: ANI1109 **PAPER - IX:** ANIMATION PRACTICAL - I **[Credit -2: No. of Practicals 10]**
	Introduction to C Programming Languages
1	Write a Program which take a input marks obtain in 4 subject and print marks obtain in 4 Subject and percentage (in float) also print student is pass or fail (student is fail if he / she Obtain less than 35 marks in any of four papers
2	Write a C program find the Area and Perimeter and Square and Rectangle
3	Write a C program find the find max, Among 3 integer numbers. And also print square of the maximum number
4	Write a C program to check whether the number is prime or not (Write a function to check number is prime).
5	Write a C program to print GCD of two integers (Write a function to find GCD).
6	Write a C program to print addition of Array elements. (Number of array element will be 5 and take the array element from user)
7	Write a C program to find an element in array. (Number of array element will be 5 and take the array element from user)
8	Write a C program to calculate n! Factorial.
9	Write a C program to read two strings and explain string library function.

	1)strlen() 2)strcyp() 3)strcat() 4) strcmp()
10	Write a C program to which contain function to obtain first 25 number of a Fibonacci series

	PAPER CODE: ANI1110 **PAPER - X:** ANIMATION PRACTICAL - II **[Credit - 2: No. of Practicals 10]**
	Visual Art and Basics of Animation
1	Free hand Drawing
2	Color Schemes
3	Color Value
4	Pencil shading
5	2D Design
6	3D Design
7	Flip Book
8	Bouncing Ball
9	Pendulum –ARC
10	Jump

	PAPER CODE: ANI1111 **PAPER - XI:** ANIMATION PRACTICAL - III **[Credit - 2: No. of Practicals 10]**
	Introduction to Graphics + Computer Based 2D Animation
1	Adding and Removing elements from background
2	Creating visiting card
3	Photo manipulation
4	Converting black and white photo to Color
5	Removing scratches and restoring old photos
6	Coloring Cartoon/Comic Character
7	Coloring Comic Page/Pages
8	Coloring vehicle / weapons / props
9	Landscape colouring
10	Portrait Painting (Digital)

	PAPER CODE: ANI1112

	PAPER - XII: ANIMATION PRACTICAL - IV **[Credit - 2: No. of Practicals 10]**
	Introduction to 3D Design
1	Object Modeling / Inorganic Modeling (Low and Semi Poly Mesh). Example of Topics: Wooden chair, Table/Desk, Cricket Bat / Dice, Mobile etc.
2	High Polygon Modeling. Example Topics: Human Hand / Foot, Tire Treads etc..
3	Basic NURBS Modeling. Wine Glass / Bottle, candle and Candle Stand etc
4	Details on NURBS Modeling. Wheel Rim / Lalten, light Lamp, etc.
5	Object Texture (Material Introduction) Example of Topics: Wooden Texture Table / Desk,
6	Object Texture (shader / Material) Object Texture (shader / Material)
7	Texture connection from file Chess board, Ludo Game
8	Texture Connection. Dice texture in basic box
9	Basic Lighting Practical. Shortcut of lighting, object glow (candle)
10	Light and Shadow. Connect light and create shadow

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Academic Year 2016-2017

ANI1201 Introduction to Information Technology

Objective:
To give you a general understanding of how a computer works. Introduce you to assembly level programming
Prepare you for future courses.
At the end of the course you'll be able to: Describe the fetch execute cycle of a computer Understand the different types of information which may be stored within a computer memory. Write a simple assembly language program

PAPER CODE: ANI1201 **PAPER - I:** Introduction to Information Technology **[Credit - 2: No. of Lectures 36]**		
	Introduction to Information Technology	**No. of Lectures**
Unit - I	Computer Program	10
Unit - II	Computer Languages	6
Unit - III	Operating Systems	9
Unit - IV	Data Communication and Computer Networks	16
Unit - V	The Internet	8
Unit - VI	Classification of Computers	8
References: 1. Computer Fundaments By Pradeep K. Sinha & Priti Sinha, sixth Edition (BPB Publication) 2. Fundamentals of Computers by V. Rajaraman		

ANI1202 Object to Orientated Programming using C++

Objective:
The course fully covers the basics of programming in the "C++" programming language and demonstrates fundamental programming techniques, customs and vocabulary including the most common library functions and the usage of the pre processor. Also To familiarize the Students with basic concepts of computer programming and developer tools. To present the syntax and semantics of the "C" language as well as data types offered by the language. & allow the Students to write their own programs using standard language infrastructure regardless of the hardware or software platform.

PAPER CODE: ANI1202 PAPER - II: Object to Orientated Programming using C++ [Credit - 2: No. of Lectures 36]		
	Object to Orientated Programming using C++	**No. of Lectures**
Unit - I	Functions in C++	**13**
Unit - II	Class and Objects	**15**
Unit - III	Inheritance, Virtual functions and Polymorphism	**10**
Unit - IV	Templates and Exception handling	**10**
References: 1. Object Oriented Programming with C++ - E. BALAGURUSWAMY 2. Let us C By Yashwant Kanitkar		

ANI1203 Traditional 2D Animation

Objective:
Students will study animation using the following perspectives: historical, aesthetic, technological, cultural, and social. This course will cover classic film animation from around the world. There is the obvious global connection that comes from the study of animation history around the world. In our country animation is most often used for entertainment, but in other countries it has served a much different purpose.

PAPER CODE: ANI1203 **PAPER - III: Traditional 2D Animation** **[Credit - 2: No. of Lectures 36]**		
	Traditional 2D Animation	**No. of Lectures**
Unit - I	Developing Animation Character	**13**
Unit - II	Anatomy & Body Language	**15**
Unit - III	Introduction to equipment required for animation	**10**
Unit - IV	Developing the characters with computer animation.	**10**
Unit - V	2D virtual drawing for animation, sequential movement drawing	**8**
Unit - VI	Thumbnails, motion studies, drawing for motion.	**6**
Unit - VII	Essentials & qualities of good animation characters	**3**
Unit - VIII	Three dimensional drawings of characters	**8**
References: 1. The Complete Animation course by Chris Patmore, By – Barons Educational Series (New York) 2. Anatomy of the Artist – Thompson & Thompson		

ANI1204 Foundation Art

Objective:
2D Design Foundations is a studio workshop addressing the elements and principles of design (line, color, shape, texture, space, form, value, unity, balance, variety, scale, proportion, rhythm, emphasis). Students are presented with visual problems to solve (by hand and digitally) on a weekly basis that relate to lecture topics. Students should view their participation in this course as a time to acquire foundational skills, develop visual curiosity, research, and experiment.

PAPER CODE: ANI1204
PAPER - IV: Foundation Art
[Credit - 2: No. of Lectures 36]

	Foundation Art	**No. of Lectures**
Unit - I	Introduction to Volume Construction	**10**
Unit - II	Introduction to Perspective Drawing	**8**
Unit - III	Introduction to Human Figure	**10**
Unit - IV	Introduction to Cartoon Character	**8**
Unit - V	Introduction to Foreshortening	**10**
Unit - VI	Introduction to Animal Anatomy	**5**

References:
1. Figure Study Made Easy By- Aditya Chari -- Grace Publication
2. Perspective By Milind Mulik -- Jyotsna Prakashan
3. Animal Anatomy for Artists – The Elements of Form – Eliot Goldfinger - Oxford University Press.

Links:
1. http://en.wikipedia.org/wiki/Color_theory
2. http://www.colormatters.com/color-and-design/basic-color-theory
3. http://en.wikipedia.org/wiki/Design_elements_and_principles
4. http://www.usability.gov/what-and-why/visual-design.html
5. http://en.wikipedia.org/wiki/Typography

ANI1205 Advance Computer Based 2D Animation

Objective:
The course starts out with an introduction to the software, followed by a tour of the interface. Once you know your way around the numerous panels and menus, you'll start to learn the drawing modes and tools that allow you to create vector and raster images to animate. All students are encouraged to take their time and become comfortable with each aspect of Flash that is taught before moving on to frame-by-frame animations.

PAPER CODE: ANI1205
PAPER - V: Advance Computer Based 2D Animation
[Credit - 2: No. of Lectures 36]

	Advance Computer Based 2D Animation	**No. of Lectures**
Unit - I	Shaping Objects - Overview of shapes, Drawing & Modifying Shapes	6
Unit - II	Basic Principles of Text	4
Unit - III	Bitmap Images & Sounds	4
Unit - IV	Object Selection, working with objects & transforming Objects	4
Unit - V	Animation - Principles , Frame by frame animation, tweening, masks	4
Unit - VI	Building a Movie- Symbol, Libraries, Structure & Exporting Movie	8

References:
1. Flash CS4 Professional Bible Published by Wiley Publishing (Robert R & Snow D.)
2.FLASH MX For PC/Mac Published by – FIREWALL MEDIA – Laxmi Publications

ANI1206 Digital Art

Objective:
You'll learn the basics so that you can complete the most basic of tasks, but you'll also get the chance to delve into some advanced features. Whether you're a graphics designer or photographer, digital artist who wants to improve Photoshop skills – or a hobbyist who enjoys editing and manipulating images – you'll learn everything about Illustrator that you need to know.

PAPER CODE: ANI1206 **PAPER - VI: Digital Art** [Credit - 2: No. of Lectures 36]		
	Digital Art	**No. of Lectures**
Unit - I	Introduction to Adobe Illustrator	**2**
Unit - II	Introduction to new document	**3**
Unit - III	Layers and Grouping	**2**
Unit - IV	Introduction to the Stroke	**4**
Unit - V	Introduction to Type	**8**
Unit - VI	Introduction to Shape Objects	**4**
Unit - VII	scale tool	**6**
Unit - VIII	clipping masks	**8**
Unit - IX	The Brush Tool	**5**
Unit - X	The Brush Tool	**6**
Unit - XI	Liquefy	**8**
References: 1. Adobe Illustrator CC Classroom in a Book ISBN: 9789332536166, Pearson. 2. ADOBE ILLUSTRATOR CS5 BIBLE		

ANI1207 3D Design

Objective: This course introduces students to all the major features of Maya: Introduction, Modelling, Texturing Rendering and popular workflow. Concepts are quickly reviewed and explained and then demonstrated using Maya. Students will gain proficiency by following class examples as well as creating projects and exercises. The coursework is designed to make sure the student is exposed to all relevant aspects of CG creation with Maya with an eye toward giving the student a base foundation from which to explore and expand.

PAPER CODE: ANI1207
PAPER - VII: 3D Design
[Credit - 2: No. of Lectures 36]

	3D Design	**No. of Lectures**
Unit - I	Rigging & Skinning of character	**8**
Unit - II	Animating character & camera	**8**
Unit - III	Importing cad files into 3ds max & creating architectural model from it	**8**
Unit - IV	Lighting	**8**
Unit - V	Rendering (Mental ray)	**4**

References:
Introduction-to-maya-2011 / 2012 / 2014 by **DARIUSH DERAKHSHANI**

ANI1208 Introduction to Media

Objective: This course examines the sociological, economic and political effects of mass communications systems and media on our culture. We will examine communication theories and models, historical and contemporary research, the mass media industries, laws and regulations, and the effects of media on society.

PAPER CODE: ANI1208
PAPER - VIII: Introduction to Media
[Credit - 2: No. of Lectures 36]

	Introduction to Media	No. of Lectures
Unit - I	Media, Media Industries & Media Audiences	**18**
Unit - II	Supporting Industries	**18**

References:
1. Mass communication in India, By Keval J. Kumar
2. Mass Communication Theory by Denis Mcquail

PAPER CODE: ANI1209
PAPER - IX: ANIMATION PRACTICAL - V
[Credit - 2: No. of Practicals 10]

	Object orientated programming using C++
1	Write a C program using switch case which perform math's operation (+,-,*, /, %)
2	Write a C program to display an element of 2 dimensional arrays in matrix form. (Array size is 3x3 and takes the array element from user)
3	Write a C program demonstrate use of structure declare following structure and write menu driven program display student info and to find student name in data
4	Define a class string. Use different constructors and do the following [20marks] - Create un-initialized string objects - Create objects with string constants - Concatenate two strings - Display desired strings

5	Write a class and member functions for a class complex as follows
	Class complex
	{
	int re, img;
	public :
	complex(int =0, int=0);
	complex(complex &);

	void accept();
	void display();
	complex add(const complex &);

6	Write necessary class and member function definitions for a cricket player object. (Use array of objects). The program should accept details from user (max 10) : player code, name, runs, Innings, played, number of times not out. The program should contain following menu: • Enter details of players. • Display average runs of a single player. Average runs of all players.
7	Write a program that consists of two classes' time12 and time24. The first one maintains time on a 12-hour basis, whereas the other one maintains it on a 24-hour basis. Provide conversion functions to carry out the conversion from object of one type to another
8	Create a C++ class mydate with three members dd, mm, yy. Write a menu driven Program with the following options. -Increment date by 1 day. -Subtract 2 days from date. (Use function overloading).
9	Create two classes dist1 (meters, centimeters) and dist2 (feet, inches). Accept two distances from the user, one in meter and centimeter and other in feet and inches. Find the sum and differences of the two distances. Display the result in both, meters and centimeters as well as feet and inches (using friend function).
10	Create a base class called Shape. Use this class to store two double values that could be used to compute the area of figures. Derive three classes called as triangle, rectangle and circle from the base Shape. Add to the base class a member function get data () to initialize base class data members and another member function display_area () to compute and display the area of figures. Make display_area () as a virtual function and redefine this function in the derived classes to suit their requirements. Using these four classes, design a program that will accept, dimensions of a triangle and rectangle and radius of circle, and display the area. The two values given as input will be treated as lengths of two sides in the case of rectangles and as base and height in the case of triangles and used as follows: Area of rectangle = x * y Area of triangle = ½ * x * y [In case of circle, get_data () will take only one argument i.e. radius so make the second argument as default argument with the value set to zero.]
11	Write a C++ program using multilevel inheritance concept which will display student information (Roll number ,marks obtain in two subject, total marks) use following information: • Class student to get and put roll number, class test to get and put marks of two subject & test will inherit class student • Class Result to compute and display total marks

	PAPER CODE: ANI1210
	PAPER - X: ANIMATION PRACTICAL - VI
	[Credit - 2: No. of Practicals 10]
	Foundation Art and Traditional Animation
1	Exterior Design Two Point Perspective
2	Object Drawing
3	Manmade Drawing
4	Run
5	Basic Proportion Male, Female and Child
6	Head Construction Male and Female Child
7	Bird Fly
8	SFX
9	Dialogue
10	Outdoor Study Landscape

	PAPER CODE: ANI1211
	PAPER - XI: ANIMATION PRACTICAL - VII
	[Credit - 2: No. of Practicals 10]
	Digital Art
1	Matte painting
2	Shapes Compostion
3	Create tattoo Designs
4	Create own text A to Z
5	Logo Design
6	Branding Visiting Card, Letter head, Envelop Design
7	Brochure Design
8	Advertise Design
9	Product modeling illustration
10	Car Modeling

	PAPER CODE: ANI1212
	PAPER - XII: ANIMATION PRACTICAL - VIII
	[Credit - 2: No. of Practicals 10]
	Introduction to 3D Maya
1	Render setup with camera. Object Render with shadow
2	Batch Render. Batch Render with Project Management.
3	Basic Object Modeling. Pen, pencil,
4	Details Object Modeling. Cupboard, wall clock
5	Spine Modeling. Wine Glass, Bottle
6	Details Spine Modeling. Coffee Mug, Water Jug
7	Basic Material Color. Apply color in different object

8	Texture in Detail Model. Wall clock / Cupboard
9	Creating Shadow. Introduce with Light and Shadow
10	Basic Rendering. Render with Different format and save it