FACULTY OF SCIENCE

SYLLABI

FOR

B.VOC. MULTIMEDIA (GRAPHICS & ANIMATION)

(1\textsuperscript{st} & 2\textsuperscript{nd} SEMESTER)

FOR

EXAMINATIONS 2014-2015

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INTRODUCTION

A vocational course is meant to give students skills based on practical activities related to specific Service, trade or profession so that they can get employment or become self-employed professionals. The course has been designed to offer updated syllabi in consultation with leading industries in the respective fields. The students will be required to undergo on the job training in a reputed industry during the course. The aim of the course is, therefore, to train the students as per the latest requirements of the industry so that they can get employment quickly.

This course intended i.e. Multimedia and Animation is proposed for creating high quality graphics and animation professionals. Emphasis on practical based training, in diploma courses and in degree in animation, gives the students hands on experience on various 2D and 3D animation software and other creative skills like drawing, sketching, sculpting, classical animation, model making, short films, creative projects, major / minor projects, pixel animation. There has been a great improvement in the demand for computer professionals during the past few years. To cater to certain graphical oriented requirements of the business sector, the Computer graphics and Animation course syllabus has been drafted.

The three years course comprises of six semesters leads to the bachelor of vocation degree with multiple exits such as Diploma/ Advanced Diploma at first and second year respectively. For admission into degree, it shall be necessary for a student to have obtained not less than 50% marks in the Intermediate +2 examinations. This course is a full time course. The course contents are designed to ensure that the students are given a right mix of theoretical and practical training by a dedicated and qualified faculty with the latest training aids. A Placement Cell of the college/ Tie ups will help students find suitable placement in industry.

Objectives of the Course

- To train the students to acquire skills in generating marketable computer graphics and animated pictures, especially in the area of advertisements/print media/film technology.
- To train the students to acquire skills and mastery in the use of different software producing graphics and animation.
- To impart real-life advertisement, animation exposure in an organization/PTC (Production cum Training centre) under OJT (On Job Training).
SCHEME OF B. Voc. MULTIMEDIA  
(GRAPHICS & ANIMATION)  
(SEMESTER SYSTEM)  

**1st YEAR**

<table>
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<tr>
<th>S.No.</th>
<th>Code No.</th>
<th>PAPER TITLE</th>
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<td>GFC-101</td>
<td>General English *</td>
<td>06</td>
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<td>2</td>
<td>GFC-102</td>
<td>State Language [ Punjabi / HCP]*</td>
<td>05</td>
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**Part B: Skilled Courses**

| 3     | MGA-101  | Multimedia & Animation             | 06      | ………  | 06     |
| 4     | MGA-102  | Corel Draw and Photoshop            | 06      | ………  | 06     |
| 5     | MGA-103  | Practical based on Paper MGA-101 & MGA-102 | ……… | 06 | 06     |

**2nd SEMESTER**

| 6     | GFC-103  | General English *                  | 06      | ----   | 06     |
| 7     | GFC-104  | State Language [ Punjabi / HCP]*   | 05      | ----   | 05     |

**Part B: Skilled Courses**

| 8     | MGA-104  | Cinematography                      | 06      | ………  | 06     |
| 9     | MGA-105  | Video and Audio Editing             | 04      | 02     | 06     |
| 10    | MGA-106  | Art Foundation: Drawing             | ………   | 06     | 06     |
|       |          | SUMMER TRAINING                     | ----    | 02     | 02     |
|       |          | On the Job Training                 |         |        |        |
|       |          | After 2nd Semester Exams            |         |        |        |

**TOTAL** 44 16 60

*Same as BCA-I Semester System Syllabus.*
SYLLABUS: SKILLED COURSE

Multimedia & Animation
Paper Code: MGA-101

UNIT I


Graphics and Image Data Representations: Graphics/Image Data Types, File Formats-GIF, JPEG, PNG, TIFF, EXIF, PDF, WMF, BMP.


UNIT II


UNIT III


UNIT IV

History of Animation, Types of Animation, Skills for Animation Artist, Basic Principles of Animation, Animator’s Drawing Tools, Rapid Sketching & Drawing, Developing Animation Character, Essentials & Qualities of Good Animation Characters, Three Dimensional Drawings of Characters.

References:

2. Chris Patmore, 2009, The Complete Animation Course, Barons Educational Series
UNIT-I

UNIT-II

UNIT-III
Adobe Photoshop Basics: Introducing Adobe Photoshop, Exploring the Photoshop Workspace, Touring the Workspace, Exploring the Photoshop Menu Bar.

UNIT-IV
Creating Selections: Using the Selection Tools, Working with Lasso Tools and Quick Selection Tools, Refining and Adjusting Selection.
Applying Sharpness and Blur Adjustment: Using Sharpening Filter, Using Blur Filter, Introducing the Blur Gallery, Using the Healing Brush Tools

References:
1. Dave Karlins, 1999: *Sam’s Teach Yourself CorelDraw9 in 24 hours*, Sams Publishing.
Practical based on Paper MGA-101 & MGA-102

Paper Code: MGA-103

There will be a practical examination in this paper along with semester examination. External examiner will evaluate the skills of the students in the field of CorelDraw and Photoshop. Examiner will give on-the-spot assignments to the students. Besides this a viva voce (oral examination) of each student one by one will also be taken by the examiner for testing the knowledge of the students.
Cinematography
Paper Code: MGA-104

UNIT I
Writing with Motion: Conceptual Tools of Cinematography, Frame, Lens, Light and Color, Texture, Movement, Establishment, Point-of-View.
Language of the Lens: Lens and the Frame, Image Control at the Lens.

UNIT II


Lighting Sources: Tools of Lighting, Daylight Source, Xenons, PARs, Soft Lights, Color Correction Fluorescents.

UNIT III

Camera Movement: Basic Techniques, Moves, Moving Shots, Camera Mounting, Crab Dolly, Cranes, Car Shots, Ariel Shots, Motion Control.

UNIT IV
Image Control: Color Printing, Controlling Color & Contrast, LookUp Tables, Camera Filter Types, Color Temperature & Filtration, Image Control with Camera.
Optics & Focus: Basic of Optics, Focus, Depth-of-Field, Macrophotography.
Set Operations: Director of Photography, Team, Time Code Slates.
Technical Issues: Flicker, Filming Practical Monitors, Shooting Process, Dimmers, High Speed Photography, Underwater Filming, Image Quality, Effects, Sun Location with Compass, Transferring Film to Video, Film Formats.

References:
UNIT I

Introduction to Video Editing, Non-Linear Editing: Meaning and Process, Hardware Requirements for NLE, Connecting Editing Equipment, Creating Time Line, Cut, Fade, Mix and Wipe, Introduction to Editing Aesthetics.

Unit II


Unit III


Unit IV


References:

Art Foundation: Drawing

Paper Code: MGA-106

There will be a practical examination in this paper along with semester examination. External examiner will evaluate the skills of the students in the field of drawing. Examiner will give on-the-spot assignments/tasks to the students. Besides this a viva voce (oral examination) of each student one by one will also be taken by the examiner for testing the knowledge of the students.

UNIT I

Free Hand Sketching From Real Objects: Building, Vehicles, Chair, Table, Trees etc.
Preparing Colour Charts.
Kind of Design- 2 D & 3 D Design

UNIT II

Designing Letter Heads and Visiting Cards, Designing Book Covers and Folders.

UNIT III

Landscape on the Spot & Landscape Form Memory (Hills, Trees, Hut, Rivers etc.), Layout Designing of Newspapers, Magazines, Print Advertisements.

UNIT IV

Poster Making on Various Themes and Designing of Hoarding Making.