# Liverpool John Moores University

Title: APPLIED LIGHTING & CAMERA THEORY

Status: Definitive

Code: **4503TVPROD** (115419)

Version Start Date: 01-08-2011

Owning School/Faculty: Liverpool Screen School

Teaching School/Faculty: Stockport College

Team	emplid	Leader
Alex Irving		Υ

Academic Credit Total

Level: FHEQ4 Value: 12.00 Delivered 40.00

**Hours:** 

Total Private Learning 120 Study: 80

**Hours:** 

**Delivery Options** 

Course typically offered: Semester 1

Component	Contact Hours
Lecture	10.000
Practical	15.000
Tutorial	5.000
Workshop	10.000

**Grading Basis:** 40 %

## **Assessment Details**

Category	Short	Description	Weighting	Exam
	Description		(%)	Duration
Essay	AS1	Written account of the similarities and differences between the way the camera reacts to light and the way the human eye adjusts for light (500 words)	30.0	
Reflection	AS2	Written evaluation of problems and solutions whilst designing lighting (500 words)	30.0	
Report	AS3	Time-logged, edited video guide to camera operation and function	40.0	

#### Aims

To develop the students's understanding of the basic theories surrounding camera operation and controlled lighting and allow them to experiment in a variety of situations.

### **Learning Outcomes**

After completing the module the student should be able to:

- 1 Demonstrate understanding of the theories underpinning light and the human eye.
- 2 Demonstrate understanding of the theories underpinning camera lenses and exposure.
- 3 Evidence understanding of different types of camera shot.
- 4 Evidence understanding of controlled lighting for effect.

### **Learning Outcomes of Assessments**

The assessment item list is assessed via the learning outcomes listed:

Written account 1
Written evaluation 2 4
Time-logged,edited 2 3 4
video guide

#### **Outline Syllabus**

Camera: setup and operation of studio & location equipment, basic camcorder operation, white balance, focal length, composition, use of focal length, control of exposure, depth-of-field, camera tricks (pull-focus, throw-focus, de-focus, etc.), perspective & viewpoint.

Lighting: The nature of light, use of apertures, understanding depth of field, setting white balance, setup and operation of location lighting kit, reflected light, colour temperatures, daylight/tungsten correction, neutral density & other light filtering, lighting design for effect (indoor/outdoor, gels, gobos, flags, nets, etc.), the inverse-square law, subject brightness range.

Other: Health & Safety

#### **Learning Activities**

Formal Lectures and seminar-based planning sessions will be followed by workshop sessions with lighting & camera equipment in studio and on location. Where possible, a session with a visiting Industrial Specialist (a Lighting Designer or established Camera Operator) will be included.

# References

Course Material	Book
Author	Brown, B.
Publishing Year	1996
Title	Motion Picture & Video Lighting
Subtitle	
Edition	
Publisher	Focal Press
ISBN	

Course Material	Book
Author	Ward, P. Bermingham, A. Wherry, C.
Publishing Year	2000
Title	Multiskilling for Television Production
Subtitle	
Edition	
Publisher	Focal Press
ISBN	

Course Material	Book
Author	Brown, B.
Publishing Year	2002
Title	Cinematography
Subtitle	Theory & Practice - Image making for Cinematographers,
	Directors and Videographers
Edition	
Publisher	Focal Press
ISBN	

Course Material	Book
Author	Freeman, M.
Publishing Year	2003
Title	Digital Photography Expert - Light & Lighting
Subtitle	
Edition	
Publisher	ILEX
ISBN	

<b>Course Material</b>	Book
Author	Millerson, G.
Publishing Year	1994
Title	Video Camera Techniques
Subtitle	
Edition	2nd Edition

Publisher	Focal Press
ISBN	

Course Material	Book
Author	Millerson, G.
Publishing Year	2000
Title	Lighting for Film & Television
Subtitle	
Edition	
Publisher	Focal Press
ISBN	

Course Material	Book
Author	Musburger, R.
Publishing Year	2002
Title	Single-Camera Video Production
Subtitle	
Edition	3rd Edition
Publisher	Focal Press
ISBN	

Course Material	Website
Author	
Publishing Year	
Title	http://www.bbctraining.com/healthandsafety.asp
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Website
Author	
Publishing Year	
Title	http://www.digitaljournalist.org/issue0011/videosmith.htm
Subtitle	
Edition	
Publisher	
ISBN	

### **Notes**

To develop understanding about how cameras react to light and develop camera skills by providing students with the opportunity to create mood by means of lighting.