

DV  
Portfolio



01:07:47

5

# DIGITAL MOVIE MAKING

LYNNE S. GROSS    LARRY W. WARD





# Contents

## chapter one

### Overview of Moviemaking 2

#### Cast and Crew 2

Producing 2

Writing 3

Directing 5

Acting 6

Production Design 7

Picture Creation 8

Sound 9

Editing 10

Special and Visual Effects 11

Other 11

#### The Production Process 12

The Traditional Film Production Model 12

The Changing Nature of the Production  
Process 14

Notes 15

## chapter two

### Planning the Movie 16

#### Finding and Financing the Right Script 16

#### Breaking Down the Script 17

#### Scheduling 19

Shooting Schedules 20

Stripboards 22

Production Schedules 22

Call Sheets 23

#### Budgeting 25

Budgeting Procedures 25

Budgeting a Student Production 29

#### Casting 32

#### Hiring Behind-the-Scenes Personnel 33

#### Finding Locations 35

#### Designing and Constructing Sets 38

#### Designing Costumes, Wardrobe, Makeup, and Hairstyling 39

#### Obtaining Props 40

#### Developing Effects 40

#### Planning Sound 41

#### Acquiring and Checking Equipment 41

#### Obtaining Rights 41

#### Arranging Travel and Food 42

#### Buying Insurance 44

#### Notes 44

## chapter three

### Cameras 46

#### Formats 46

Film Formats 46

Analog Video Formats 47

Digital Video Formats 48

High-Definition Video Formats 49

#### Aspect Ratio 51

#### Stock 52

Film Stock 52

Videotape 53

#### Camera Construction 54

Film Cameras 54

Video Cameras 55

#### Time Code 55

#### Viewers 56

#### Basic Camera Features 57

Power 57

Recording Controls 57

Color Rendition 58

Gain 58

Shutter Speed 58

Other Features 58

#### Lenses 59

Focal Length 59

Focus 60

Aperture 61

Depth of Field 61

#### Camera Supports 62

Handheld Cameras 62

Tripods 63

Dollies and Cranes 64

#### Connectors 64

#### Care of Equipment 65

#### Notes 65

## chapter four

### Approaches to Image Capturing 68

- Shot Determination 68
  - The Basic Shots 68
  - Subjective Shots 69
- Lens Selection 70
  - Focal Length Characteristics 70
  - Depth of Field 71
- Camera Angle 72
- Composing Within the Static Frame 73
  - Manipulating the Mise-en-Scène 73
  - Balance 75
  - Creating Depth 75
  - On-Screen/Off-Screen Space 76
  - The Edge of the Frame 76
- The Moving Frame 78
  - Camera Movements 78
  - Zooming 78
  - Time 79
- Color and Tonality 79
  - Black and White or Color 79
  - Color Considerations 80
- Shooting to Edit 80
  - Shot Selection 80
  - Shot Duration 81
  - The Long Shot, Medium Shot, Close-Up
    - Pattern 82
  - Shooting for Continuity 82
- Now That You Know the Rules... 84
- Notes 84

## chapter five

### Lights and Filters 86

- Measuring the Light 86
  - Incident Meters 86
  - Reflected Light Meters 86
  - Spot Meters 87
- Getting Correct Exposure 87
  - Problems with Automatic Metering Systems 88
  - Footcandles, F-Stops, and EI 88
  - Contrast Range 89
  - Using a Monitor to Help Evaluate Exposure 90
  - Using a Waveform Monitor to Evaluate Exposure 90
- The Color of Light 91
  - The Electromagnetic Spectrum 91

- The Kelvin Scale 92
- Tungsten and Daylight-Balanced Light 92
- Small-Scale Color Corrections 93
- The Vectorscope 93

### Filters for Film and Video 94

- Types of Filters 94
- Mounting Filters 95
- Compensating for Filters 95
- Care of Filters 96

### Artificial Lighting 96

- Types of Lamps 96
- Basic Lighting Instruments 98
- Mounting Equipment 101
- Controlling the Light 101

### Electric Power Requirements 104

### Lighting Safety 105

### Notes 106

## chapter six

### Approaches to Lighting 108

- Lighting Styles 108
  - Basic Three-Point Lighting 108
  - Comparison of Lighting for Film, SDTV, and HDTV 110
  - Preparing to Light 111
  - Outdoor Lighting 112
    - Contrast Reduction 113
    - Maintaining Continuity in Changing Light 113
    - Shooting at Night 114
    - Adapting to Weather Conditions 114
  - Indoor Lighting 115
    - Shooting in Available Light and Low Light 115
    - Bounce Lighting 116
    - Mixed Lighting 116
  - Lighting for Movement 117
  - Variations in Lighting 120
  - Notes 122
- ## chapter seven
- ### Microphones and Recorders 124
- The Nature of Sound 124
    - Pitch and Frequency 124
    - Loudness and Amplitude 125
    - Timbre 126

- Duration 126
- Velocity 126
- Microphones 127
  - Directionality 127
  - Construction 129
  - Positioning 130
- Cables and Connectors 132
  - Balanced and Unbalanced Cables 132
  - Connector Types 132
- Recorders 133
  - Double System and Single System Sound Recording 134
  - Types of Recorders 135
  - Recording Methods 136
  - Features of Sound Recorders 136
- Audio Mixers 137
- Care of Audio Equipment 138
- Notes 138

## chapter eight

### Approaches to Sound Recording 140

- Elements of Microphone Pickup 140
  - Presence 140
  - Perspective 141
  - Balance 141
  - Continuity 142
- Eliminating Unwanted Noises 142
- Miking Dialogue 143
  - Selecting the Mic 143
  - Setting Up the Mics 144
  - Special Dialogue Situations 144
- Miking Automatic Dialogue Replacement 145
- Miking Voice-Overs 146
- Miking Sound Effects 147
- Miking Foley 147
- Miking Ambient Sounds 148
- Miking Music 149
- Recording Techniques 150
- Notes 151

## chapter nine

### Directing 152

- The Roles of the Director 152
- Working with the Script 153

Working with the Writer 155

Working with a Crew 157

Hiring Crew 157

Handling Crew 157

Auditioning Actors 159

Preliminaries 159

The Process 160

Rehearsing 160

Early Rehearsing 160

Ways to Improve Rehearsals 161

Shooting 162

A Typical Pattern 162

Dailies 164

Other Considerations 165

Editing 167

Notes 169

## chapter ten

### Editing 170

Making Material Computer Ready 170

Film 170

Analog Video 172

Digital Video 173

Setting Up the Computer 173

Logging 174

Capturing 175

Cutting Clips Together 176

Windows 176

The Assembly Process 177

Fine Tuning 179

Adding Graphics 180

Adding Transitions and Other Effects 180

Useful Tools 182

Outputting the Project 183

Linear Editing 185

Cuts-Only Editing 185

More Advanced Linear Editing 186

Notes 186

## chapter eleven

### Approaches to Editing 188

Conventional Hollywood Patterns 188

Editing in the Service of the Story 189

Maintaining Continuity 190

Using the Master Shot Method 192



## Contents

- Ensuring Consistent Screen Direction 195
- Finding the Cutting Point 197
- Controlling Rhythm 198
- Manipulating Time and Space 198
- Creating Transitions 200

### Alternatives to Conventional Editing 201

- Montage Editing 201
- Time and Space Alterations 202
- Less Is More 203
- Dominant Elements 203
- Shot Ordering 203

Notes 204

### chapter twelve

## Enhanced Audio, Graphics, and Visual Effects 206

### Audio 206

- Spotting 206
- Gathering and Recording 209
- Sweetening 214
- Positioning 214
- Mixing 216

### Graphics 218

- Software Programs 218
- Optical Titles 219

### Visual Effects 220

- Optical Visual Effects 220
- Computerized Visual Effects 221
- The Process for Creating Computerized Visual Effects 223

Notes 224

### chapter thirteen

## Approaches to Enhanced Audio, Graphics, and Visual Effects 226

### Audio 226

- Supplying Information 226
- Enhancing Reality and Fantasy 229

Establishing Time, Place, and Character 230

Creating Mood and Emotion 231

Giving a Sense of Rhythm 233

Directing Attention 234

Relating to the Image 235

### Graphics 236

Graphic Characteristics 236

Structuring Graphics 237

### Visual Effects 238

Notes 240

### chapter fourteen

## The Final Stages of Moviemaking 242

### Transferring Back to Film 242

Negative Cutting 242

Preparing the Sound 242

Incorporating Visual Effects 243

Laboratory Work 244

Film Projection 246

### Video Distribution 247

Netcasting 248

Festivals 248

Other Possibilities 249

Digital Cinema 249

Notes 251

Glossary 252

Index 265