

FUNDAMENTALS OF PHOTOGRAPHY

COURSE OUTLINE

JOHN GRENGO | PHOTOGRAPHY

Class Introduction

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|--------------------------------|-------|
| Class Overview | |
| Welcome to Photography | |
| John Greengo Photography | |
| Becoming a Photographer | |

Section 1: The Camera

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|-----------------------------------|-------|
| Camera Types | |
| Image Area | |
| Viewing System | |
| DSLR | |
| LCD | |
| EVF | |
| SLT | |
| Rangefinder | |
| Hybrid (Optical/Electronic) | |
| Other Systems ..... | ..... |
| Lens System ..... | ..... |
| Mobile Device ..... | ..... |
| Point & Shoot (P&S) ..... | ..... |
| DSLR ..... | ..... |
| Mirrorless ..... | ..... |
| Shutter System ..... | ..... |
| Leaf Shutter ..... | ..... |
| Focal Plane Shutter ..... | ..... |
| Electronic Shutter ..... | ..... |
| Shutter Speeds ..... | ..... |
| Basics ..... | ..... |
| Effects ..... | ..... |
| Camera/Lens Stabilization ..... | ..... |
| Learning Project 2 ..... | ..... |
| Quiz: Shutter Speeds ..... | ..... |
| Camera Settings ..... | ..... |
| File Type ..... | ..... |
| White Balance | |
| Color Space | |
| Drive Mode | |
| Buffer | |
| Memory Cards | |
| Card Formatting | |
| Date & Time | |

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|------------------------|-------|
| Firmware | |
| Custom Functions | |
| Diopter..... | |

Section 2: The Sensor

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|------------------------------|-------|
| Opening | |
| The Photographers Life | |
| Sensor Size - Basics | |
| Sensor Size - Compared | |
| Size & Cost ..... | ..... |
| Depth of Field ..... | ..... |
| Full Frame vs. APS..... | ..... |
| Pixels ..... | ..... |
| Quantity & Size..... | ..... |
| Sensor Design..... | ..... |
| ISO ..... | ..... |
| Basics ..... | ..... |
| Recommended Settings ..... | ..... |
| Learning Project 3 ..... | ..... |
| Closing ..... | ..... |

Section 3: The Lens

| | |
|-----------------------------|-------|
| Opening ..... | ..... |
| Focal Length..... | ..... |
| Angle of View ..... | ..... |
| Examples ..... | ..... |
| Human Eye..... | ..... |
| Normal Lens ..... | ..... |
| Wide Angle..... | ..... |
| Telephoto ..... | ..... |
| Summary ..... | ..... |
| Learning Project 4 ..... | ..... |
| Quiz: Focal Length..... | ..... |
| Fisheye ..... | ..... |
| Tilt Shift..... | |
| Perspective Correction..... | |
| Panorama | |
| Focus Control | |
| Subject Zone | |
| Summary | |

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|----------------------------|-------|
| Lens Speed..... | |
| Aperture | |
| Depth of Field (DOF) | |
| Explanation | |
| Equivalent Aperture | |
| Examples ..... | ..... |
| Learning Project 5 | |
| Quiz: Apertures | |
| Lens Quality | |
| Closing | |

Section 4: Exposure

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|------------------------------|-------|
| Equipment Life Cycle..... | |
| Light Meter Basics | |
| Metering Modes | |
| Histogram | |
| Quiz: Histogram | |
| Dynamic Range ..... | ..... |
| Exposure Modes..... | ..... |
| Program ..... | ..... |
| Shutter Priority..... | ..... |
| Aperture Priority ..... | ..... |
| Exposure Compensation..... | ..... |
| Manual ..... | ..... |
| Sunny 16 Rule ..... | ..... |
| Exposure Bracketing..... | ..... |
| Recommendations ..... | ..... |
| Exposure Values..... | ..... |
| Setting Priorities ..... | ..... |
| Freeze motion..... | ..... |
| Blur Motion ..... | ..... |
| Maximize DOF..... | ..... |
| Minimize (Shallow) DOF ..... | ..... |
| Maximize Sharpness | |
| Tricky Exposures | |
| Quiz: Exposure | |
| Closing | |

Section 5: Focus

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|-----------------------------------|-------|
| Photo Cliche | |
| Focusing Basics | |
| Focus Limit Switch | |
| Distance Scale | |
| Magnify Playback | |
| Auto Focus Systems ..... | ..... |
| Phase Detection Focusing ..... | ..... |
| Contrast Detection Focusing ..... | ..... |
| Hybrid AF Systems ..... | ..... |
| Dual Pixel CMOS AF ..... | ..... |
| Auto Focus (AF) ..... | ..... |
| Focus Mode ..... | ..... |
| Focus Points ..... | ..... |
| Focus Tracking ..... | ..... |
| Auto Focus Lock ..... | ..... |
| Manual Focus ..... | ..... |
| Lenses ..... | ..... |
| DSLR Viewfinder ..... | ..... |
| DSLR Live View ..... | ..... |
| Digital Focus Assistance ..... | ..... |
| Magnification ..... | ..... |
| Focusing Scale ..... | ..... |
| Peaking ..... | ..... |
| Dual Image ..... | ..... |
| Digital Split Image ..... | ..... |
| DSLR Focus Options ..... | ..... |
| Mirrorless Focus Options ..... | ..... |
| Shutter Speeds ..... | ..... |
| Depth of Field (DOF) ..... | ..... |
| Variables ..... | ..... |
| Quiz: Depth of Field ..... | ..... |
| DOF Preview ..... | ..... |
| DOF & Focusing Screens ..... | ..... |
| Lens Sharpness ..... | ..... |
| MTF Chart ..... | ..... |
| DXO Mark Ratings | |
| Camera Movement | |
| Handholding | |
| Camera/Lens Stabilization | |
| Tripods | |

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| Advanced Techniques | |
| Mirror Lock-up (DSLR)..... | |
| Quiz..... | |
| Hyperfocal Distance..... | |
| Quiz..... | |
| Auto Focus Calibration..... | |
| Focus Stacking | |
| Post Processing | |
| Quiz: Focus Problems | |
| Closing | |

Section 6: The Gadget Bag

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| Camera Accessories | |
| Vertical Grips | |
| Remotes..... | |
| Memory Cards | |
| Batteries..... | |
| Battery Chargers..... | |
| Power ..... | ..... |
| Sensor Cleaning..... | ..... |
| Viewing Loop ..... | ..... |
| Angle Finder..... | ..... |
| LCD Protection..... | ..... |
| Microphone..... | ..... |
| GPS ..... | ..... |
| Underwater ..... | ..... |
| Lens Accessories ..... | ..... |
| UV Filter ..... | ..... |
| Polarizing Filters..... | ..... |
| Neutral Density Filter ..... | ..... |
| Graduated Neutral Density Filter ..... | ..... |
| Lens Hood..... | ..... |
| Teleconverter (Extender)..... | ..... |
| Lens Adaptors & Speed Boosters ..... | ..... |
| Lens Cleaning & Storage | |
| Macro | |
| Macro Lenses | |
| Extension Tubes | |
| Close-up Filter..... | |
| Macro Rails..... | |

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| Flash & Lighting | |
| Speedlight Units | |
| Off-shoe Cord | |
| Diffusers | |
| Extenders | |
| Brackets | |
| Macro Light ..... | ..... |
| Tripods ..... | ..... |
| Legs ..... | ..... |
| Heads ..... | ..... |
| Quick Release | |
| Level | |
| Monopods | |
| Stabilization | |
| Cases | |
| Closing | |

Section 7: Light

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|-----------------------------------|-------|
| Being a Photographer | |
| Qualities of Light | |
| Natural Light | |
| Types of Light | |
| Direct Sunlight | |
| Front Light ..... | ..... |
| Side Light ..... | ..... |
| Back Light ..... | ..... |
| Overhead Light ..... | ..... |
| Spot Lighting ..... | ..... |
| Indirect Sunlight ..... | ..... |
| Overcast ..... | ..... |
| Open Shade ..... | ..... |
| Reflected ..... | ..... |
| Mixed Light ..... | ..... |
| Sunrise / Sunset ..... | ..... |
| Fundamentals ..... | ..... |
| Three Peaks | |
| Twilight | |
| Cloud Light | |
| Color Pop | |
| Silhouette | |
| Starburst | |
| Golden Hour | |

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| Quiz: Light | |
| Light Management | |
| Natural Light | |
| Reflectors & Diffusers | |
| Steps to Controlling Light | |
| Artificial Light ..... | ..... |
| Flash Fundamentals ..... | ..... |
| Manual Flash ..... | ..... |
| Auto Flash ..... | ..... |
| TTL (Through The Lens) Flash ..... | ..... |
| Inverse-Square Law ..... | ..... |
| Focal Plane Shutter ..... | ..... |
| Flash Duration & Power ..... | ..... |
| Red Eye ..... | ..... |
| Speedlights ..... | ..... |
| Built-in Flash ..... | ..... |
| Add-on Flash ..... | ..... |
| Off-Camera Flash ..... | ..... |
| PC & TTL Cords ..... | ..... |
| Wireless Flash ..... | ..... |
| Transmitter & Receiver ..... | ..... |
| Light Modifying Equipment ..... | ..... |
| One Flash Setup ..... | ..... |
| Multiple Flash Setup ..... | ..... |
| Sample Lighting Costs ..... | ..... |
| Examples ..... | ..... |
| Flash Video ..... | ..... |
| Advanced Flash Techniques ..... | ..... |
| Flash Duration & Power ..... | ..... |
| Front & Rear Curtain Sync | |
| High Speed Sync | |
| Multi Strobe | |
| Closing | |

Section 8: The Art of Editing

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| Intro: Assessments & Goals | |
| Set-up | |
| Computers | |
| Drives | |
| Organization | |
| Import | |

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|---------------------------------|-------|
| Organizing..... | |
| Where to Start? | |
| Files & Folders | |
| Keywords | |
| Collections | |
| Rank | |
| Stars | |
| Flags..... | ..... |
| Colors..... | ..... |
| Adobe Lightroom Shortcuts..... | ..... |
| Culling ..... | ..... |
| Basics ..... | ..... |
| Reasons to Eliminate..... | ..... |
| Reasons to Elevate ..... | ..... |
| Eliminate or Elevate? ..... | ..... |
| Develop ..... | ..... |
| Programs ..... | ..... |
| Categories of Development ..... | ..... |
| Color & Black and White..... | ..... |
| Technical Corrections ..... | ..... |
| Noise..... | ..... |
| Distortion ..... | ..... |
| Chromatic Aberrations ..... | ..... |
| Vignetting ..... | ..... |
| Parallax ..... | ..... |
| Sharpening ..... | ..... |
| Exposure ..... | ..... |
| Distractions | |
| Cropping | |
| Composition | |
| Aspect Ratio | |
| Closing | |

Section 9: Composition

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|---------------------------------------|-------|
| Opening | |
| Formula for Great Photos | |
| Composition Basics | |
| Simplify | |
| Intrusions | |
| Fill The Frame | |
| Mystery | |

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| Work the Scene | |
| Composition Video | |
| Point of View | |
| Better Viewpoint | |
| Better Light | |
| Better Focus ..... | ..... |
| Clean Background ..... | ..... |
| Dark Background ..... | ..... |
| Light Background ..... | ..... |
| Silhouette ..... | ..... |
| Unique Perspective ..... | ..... |
| Down ..... | ..... |
| Up ..... | ..... |
| Angle of View ..... | ..... |
| Additive Vs Subtractive ..... | ..... |
| The Best Story ..... | ..... |
| Wide & Tight ..... | ..... |
| The Photo Story ..... | ..... |
| Compression ..... | ..... |
| Wide & Close ..... | ..... |
| Subject Placement ..... | ..... |
| Rule of Thirds ..... | ..... |
| Direction ..... | ..... |
| Golden Ratio ..... | ..... |
| Horizon Line ..... | ..... |
| Symmetry ..... | ..... |
| Reflection ..... | ..... |
| Balance ..... | ..... |
| Framing ..... | ..... |
| Shadow Framing ..... | ..... |
| Foreground / Background ..... | ..... |
| Scale ..... | ..... |
| Rule of Odds ..... | ..... |
| Bad Composition ..... | ..... |
| Multi-shot Techniques ..... | ..... |
| Panorama ..... | ..... |
| Panorama Stitching ..... | ..... |
| Double Exposure | |
| High Dynamic Range | |
| Focus Stacking | |
| Pixel Shift | |
| Time-Lapse | |

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| Selective Cloning (People Filter) | |
| Noise Reduction | |
| Closing | |

Section 10: Photographic Vision

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| Opening | |
| Human Vision vs. The Camera | |
| The Deceptive Eye | |
| Human Vision Advantage..... | |
| Camera Advantage ..... | ..... |
| Visual Perception ..... | ..... |
| Visual Balance..... | ..... |
| Visual Drama..... | ..... |
| Contrast ..... | ..... |
| Sharpness ..... | ..... |
| Panning ..... | ..... |
| Pan & Zoom ..... | ..... |
| Elements of Design ..... | ..... |
| Line ..... | ..... |
| Diagonal Line..... | ..... |
| Curved Line..... | ..... |
| Leading Line ..... | ..... |
| Shape ..... | ..... |
| Shape & Shadow ..... | ..... |
| Human Shape ..... | ..... |
| Gesture ..... | ..... |
| Pattern ..... | ..... |
| Pattern Breaker..... | ..... |
| Texture ..... | ..... |
| Negative Space..... | ..... |
| Black & White..... | ..... |
| Color..... | ..... |
| Basic Color ..... | ..... |
| Spot Color ..... | ..... |
| Graduated Color ..... | ..... |
| Monotone Color..... | ..... |
| Color Matching ..... | ..... |
| Complimentary Colors ..... | ..... |
| The Photographic Process | |
| Working the Shot | |
| What Makes a Great Photo? | |
| Closing: The Moment | |

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