FLAAR
Digital Imaging Resource Center

Syllabus of Nicholas Hellmuth's
Digital Photography Course

Medium format digital

Example of quality you too can achieve with a digital camera with tips and help of this course on digital photography

35mm SLR digital

Large format digital

These digital shots were accomplished with a basic simple camera. Professor Hellmuth will document that you do not need a $35,000 digital camera to achive professional results.

FLAAR has some of the most costly digital cameras in the world (one costs $97,000), but the shots on this page were made with a Nikon D100.

We have seen comparable outstanding digital photographs with a Nikon CoolPix.

Course Description DIGITAL PHOTOGRAPHY

Explore digital photography with Nicholas Hellmuth

Experiment expanding your personal photographic capabilities

Enjoy the satisfaction of seeing your family and friends admire your new found photographic talent.

Beginner through Intermediate into professional quality digital photography. The course is divided into two parts (clearly outlined in the Abstracts).

DP 100 Achieving Quality in Digital Photography

DP 200 Taking Digital Photography to the Next Level

You too can achieve beautiful results with any digital camera. Irrespective of how many megapixels, you can produce award-winning digital photographs. It just helps to have some tips and suggestions from a course such as this program via FLAAR at BGSU.

This syllabus covers the overall course (namely both parts). Please obtain the separate "Abstracts" that describe the course units, which has a Part I (Introductory-Intermediate level) and a Part II (Intermediate into professional level).

Includes:

- ***35mm, medium format, and large format digital cameras***
- ***How to select the digital camera which is best for your needs***
- ***How to avoid choosing the wrong camera, lighting, or accessories***

A feature of this course, and what makes it unique, is the focus on

Digital Photography as Input for Digital Printing with

- ***Inkjet printers of all sizes but especially wide format***
- ***Laser printers (toner based) (desktop publishing)***
- ***RGB laser light imagers (Durst Lambda, LightJet, ZBE Chromica)***
- ***Fuji Pictography***
- ***Kodak dye sublimation (wax, resin ribbon heat transfer)***

Although this is not a course on printing we realize that achieving a stunning print is our goal. If your digital print inspires awe and admiration by viewers, if publishers want your work, or even if just your spouse, children, and family are impressed, then you know you have learned something.

All course material is organized by Nicholas Hellmuth, PhD, Visiting Professor, Bowling Green State University of Ohio, in cooperation with FLAAR. Dr Hellmuth's photographs have been published by National Geographic as well as in coffee-table art books in Japan, the USA, and Europe.

The teaching assistants include Audra Magermans, a BGSU graduate student in the art department and Martha Martinez, who taught the course with Prof. Hellmuth at the University of Malta and at the Universidad Francisco Marroquin (in Guatemala). Martha likes to do portrait photography and B&W in general.

Open enrollment, via web-based training (for the Internet version)
You do not have to be resident in Ohio; you can take this course from anywhere in the world via the Internet.

If you want information on this course in convenient Adobe PDF format, click here for automatic download of abstracts of all the course subject units.

You can receive the course on the days and hours convenient for you from January 12th, 2004. If you need to go away on a business trip you can skip as many days as you need to, then return and pick up precisely where you left off. In other words, you can schedule receiving the course in a personalized manner within the framework of January through February (DP 100) and March through April (DP 200).

If you want to sign up for this course click here

Since this is entirely based on training via the Internet, you do not have to attend any classroom in Ohio. Dr Hellmuth will broadcast major portions of this course directly from his photo studios and other times will report from out on location in various countries. Nicholas is not just a professor, he is an active photographer and likes to escape and get outside and accomplish digital photography.

Introduction

FLAAR was in the forefront of museum-quality, traditional studio and location photography before digital imaging even existed. This experience means that the new course can empathize with traditional photographers, who have a background in 35mm, medium format, and large format photography, as well as non-photographers who also need to move into the shifting sands of the digital millennium.

Course Abstract

Course discusses, compares and contrasts, to reveal the pros and cons of

- Nikon, Canon, Olympus, Pentax, Kodak, Foveon-Sigma, Fuji for 35mm SLR level.
- BetterLight, PhaseOne, Anagramm, Kigamo for large format at the high end.
- Nikon CoolPix, Sony, Minolta, Olympus, Fuji, Canon, and other zoom-lens entry level.
- Imacon, Fuji Luma, Jenoptik EyeLike, MegaVision, Kodak, PhaseOne, Sinar for medium format.

This course provides step-by-step instruction of how to produce digital photographs that contain optimal resolution for impressive output with wide format printers.

Although the emphasis is on capturing a large enough image with enough resolution for wide format printers, it is natural that if you have only a tabloid sized printer, such as Epson 1520, Epson 2000, Epson 3000, Epson 5000, Epson 5500, one of the newer Epson 4000, 2200, Hewlett-Packard 10ps, 20ps or 50ps, 120nr, Canon 8500 or Canon imagePROGRAF models. You will also learn how to produce better photographic and fine art giclee prints as a result of this course.

Nicholas and Anne discuss the results of using the Sigma and Nikon digital 35mm SLR cameras both on the island of Malta. Here with two of the 15 large format printers in the FLAAR facility at BGSU.

Nicholas has nineteen inkjet printers in his studio, including the fabled Iris 3047 giclee printer, in the same facilities where he broadcasts the training course.

However, this course is also appropriate for people who need to produce the absolute top quality with a Xeikon, Scitex, Xerox, or HP-Indigo-type variable data liquid toner digital printer or Fuji Pictrographic. Actually if you are patient you can do wonders with a good laser printer in your office; Nicholas has accomplished exhibit quality photos from regular laser printers.

It is perfectly okay if you do not yet have any printer at all (none is required; you can take the course without owning either any camera nor any printer).

Target Audience

People who take this course want to learn from an experienced photographer who has actually used the complete range of digital cameras. You do not need these cameras yourself: what is important is that your instructor knows about each and every one so he can teach you.

Most of the people who sign up for the course primarily want tips on which camera brand and model to purchase. Then they seek help on knowing what lighting and accessories to use. Help with color management is much sought after also.

Professor Hellmuth and participants visit PMA photography trade show together. This is an option, not a requirement.

This course is appropriate for the following professions:

*Artists who want to produce fine art giclee,

*Graphic Designers

*Photographers, intermediate level and up

- Studio photographers
- Product photography
- Industrial photography
- Architectural photography
- Landscape and panorama photography
- Wildlife photography, plants, animals, birds
- Portrait and event photographers
- Fine art (giclee) photographers

Leisure and pro-sumer photographers who aspire to learn how to produce better digital results.

Geologists and geographers

In-house corporate graphic staff

Museum staff

Architects, art historians, architectural historians

Realtors who need to produce excellent images

Instructors at community colleges, colleges, universities, art schools, who themselves wish to use, or teach, digital photography

Students of all levels in any of the above fields who need or desire to learn advanced digital photography

Enthusiasts, any age, all backgrounds, welcome from any country.

This course is also appropriate for individuals in the following industries:

- Advertising agencies
- Sign shops that specialize in POP signs
- Quick print shops
- Reprographic shops
- Prepress
- Proofing
- Courtroom graphics is another area where the quality of display graph ics may win a court case
- Government agencies
- Hotel companies
- Travel agencies
- Tradeshow graphics

Course Objectives

Participants enrolled in this course should have the following goals:

* Understand why and in what aspects an original digital photograph may produce a better result than would a scanned negative or transparency (and vice-versa in other circumstances: we explain the occasional instances when a traditional photograph is better than a digital photograph)

* Understand how the quality of a digital photograph can equal the quality of a traditional darkroom photograph, and in what circumstances this is not so

* Learn which type of digital sensor will produce the types of photographs you and/or your company need to print. Once you know the capabilities of each distinct type of digital sensor (CCD vs CMOS), then you can make an appropriate selection of a make and model of digital camera (remembering that every camera has some good features, and those same good cameras have a few weak points).

* Be able to make the best use of a camera you already have to produce at the quality that you need

* Be able to go to any trade show or camera store (or wide format printer dealer), and understand the jargon, distinguish advertising hype from reality, and be able to make an educated selection of equipment

* Know which aspects of Adobe Photoshop you need to concentrate on either with practice or through a subsequent course. You will also receive instruction on what after-market software is a good companion for Adobe Photoshop, and which digital asset management software can keep track of all your images.

* If you wish to be at ease with the jargon of digital photography, digital imaging, and wide format printing, then you have come to the right place. You will have enough glossaries available to you so that you will be able to read, and understand, even the most arcane report on these subjects and at least know where to go to get help with the definitions.

Buttefly image taken by Dr. Hellmuth while he was at Panajachel at Lake atitlan in Guatemala

Digital photography is actually relatively easy if a helpful instructor guides you through the jargon, guides you through the difference between CCD and CMOS sensors, and inspires you to set high standards for your personal or professional photography.

Research and Preparation undertaken to prepare this course for you

Three years ago we conducted a survey of roughly 90% of the photography courses available in the USA. Much to our surprise, out of several hundred universities, community colleges, institutes, museums, or photography schools, less than 3-dozen actually offered a course even labeled as digital photography.

But the majority of courses that were advertised as “digital photography” turned out to be introductory courses primarily on scanning (which is digital imaging, not digital photography). In the few courses where a digital camera was discussed, only about 10% of the course was dedicated to the camera; 90% of the course was on Adobe Photoshop-teaching students how to repair bad scans. Again, the rubric of “digital photography” has been improperly assumed to cover scanning traditional film and then imaging the resultant scans.

Of the rare instances when a course was really on digital cameras and actual digital photography, probably seven or fewer offered a program in large format digital photography. Courses on inkjet printing were even rarer.

In distinction, FLAAR at BGSU offers a unique course, not a generic course, on scanning and Adobe Photoshop (which you can find almost anywhere). This course by BGSU+FLAAR is dedicated to showing how your digital photography can be (and definitely should be) good quality from the moment of image capture. Your photography should be so good out of the camera that you rarely need to use Adobe Photoshop (other than to resize the image for final printing). Obviously, in real life this goal is elusive, but nonetheless, this course seeks to prepare good quality digital photos to begin with, straight from the camera.

This goal implies learning which digital cameras are best for producing these ideal images. It turns out that the brand name is not always the relevant aspect; what you need to learn is which of the several competing technologies is best for your specific needs.

To incorporate a good mix of learning how to handle a digital camera together with specific features of Adobe Photoshop exclusively dedicated to digital photography, this course will be divided into levels to increase your understanding step by step.

* The major portion of the course will be directly on digital cameras, lenses, filters, CCD vs CMOS sensors, digital accessories, lighting, etc
* digital photography in the studio as well as out on location
* once you learn how to take good digital images the course will list which aspects of Adobe Photoshop will make them even better. But this is not a course only on Photoshop because the best measure of a good photograph is never having to use Photoshop to repair it.
* a component of the course will introduce you to how to prepare the image for printing on a large format printer: resolution for example. How much resolution does each kind of printer technology really need: inkjet, dye sub, electrostatic, laser light, laser toner, etc. There is no book which will tell you this information (we know, we looked in over 30 books on digital photography, on scanning, and on Adobe Photoshop).


Testing Elinchrome strobes from Bogen Photo at FLAAR studio

Course Content

The emphasis of this course is 35mm SLR digital cameras, medium format digital backs, and large format digital scan backs but starting with basic 4 to 5 megapixel cameras, and gradually learning about the others from a patient instructor who has lots of experience.


Focus on 35mm SLR digital cameras. Nikon, Foveon, Sigma and others

A new generation of larger megapixel CCD sensors has made it possible to accomplish basic large format printing with a point-and-shoot digital camera costing less than $1,000. Six years ago a camera of this nature would have cost $28,000 (that's what Nicholas started digital photography with when teaching in Japan in 1996).

This course is now adding coverage of economical point-and-shoot digital cameras, but only at pro-sumer level, with the newest generation of 5 and 6 megapixel cameras as a starting point. Minolta DiMage, Olympus, Nikon CoolPix, equivalent Sony and Fuji models would be examples.

Testing Kodak ProBack plus on Hasselblad 555 ELD on location in Central America. In the background, Nikon D-100, 35 mm SLR digital camera

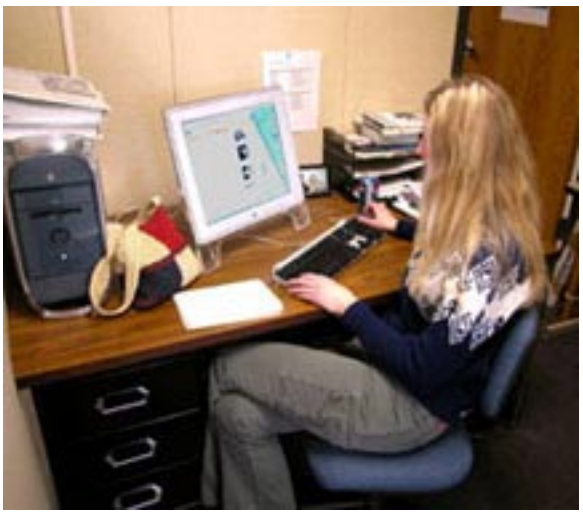
* Video frame capture is not covered since resolution is inadequate for enlargement.

* Although there will be readings on color management, discussion of color management, glossaries of terms on color management, and lists of precisely what tools, software, and consultants can take care of your digital photography, and/or your needs for color management in wide format printers, we recommend that to master color management per se you also take a separate dedicated workshop.

Course Delivery

This course will be delivered via Blackboard software, the premier educational software for web-based learning. You will be provided access at no extra charge.

This course does not use slick videos nor interactive CDs. It costs about $25,000 to produce a single CD; a whole course would require a dozen or more. We estimate you would prefer not to pay what that kind of video and/or CD system would cost.



FLAAR staff at Bowling Green State University editing Dr. Hellmuth's material for the course.

Course Schedule

The main course on the Internet is via BGSU and starts in mid-January, 2004. Since it is via Internet, you can start it whichever date is convenient to yourself (anytime after the official starting date). There will be occasional periods when your instructor is away consulting both nationally and internationally, or attending seminars. Since everything takes place over the Internet, it makes no difference where the professor is, or where you are.

This course, with Part I and Part II combined, is intended to be equivalent to a 30 hour mid-level university course. However you do not have to be a professional photographer (or even an unprofessional photographer). You are allowed to take Part I by itself.

You can disappear during the course period. We get used to this because many of the people who take this have a job and family too. So they have often gone away on business in the middle of the course. There are no grades; no attendance is taken. We are all adults.

The summer course version (in person in Guatemala at Universidad Francisco Marroquin) will run from mid-June for a month into mid-July, 2004.

Course Requirements for you: Hardware and Software

A computer
* Either Mac or PC
* 256 MB RAM is minimum, 512 MB is better,
* Several GB of free hard drive space

Internet access
* 56K modem is preferred since you will need to do considerable reading and research on the Internet

* E-mail account at convenient location and convenient times

Dell computer workstations arriving at BGSU lab in art department. Notice all the Mac computers too; we use both.

*We do not recommend Photoshop version 5.5 but you can still take the course if that is the version you have.

One of the textbooks appears to have a mini-version of Adobe Photoshop included in the CD that comes with the book. If this has enough functions, it would allow you at least to get started.

You need to have Microsoft Word to send in your assignments by e-mail attachment.

Digital Camera

As a student of this course you do not have to own a camera, but ought to at least to borrow one during the course. If they do not have one yet, they should wait until the course starts since we will discuss all the pros and cons of various makes and models. We will provide information to assist the students in their eventual choice.

Equipment Recommended but Not Required

A printer to print out reading assignments

* Laser will be much faster than a desktop inkjet
* B+W laser printer is adequate though obviously color has advantages
• However, you can go to any Kinko's or comparable and print color when necessary
* Adobe Photoshop version 6.0 preferred though naturally you may also use the newer ver 7.0 or CS

Prerequisites: what background or preparation do you need to have?

It helps to already know Photoshop or a comparable image editing software. It would be tough to teach you basics of Photoshop from the absolute beginning. Indeed what makes this course unique is that it's not a course on Adobe Photoshop hiding under a pseudo-title of "digital photography."

However if you are clever, you can learn Photoshop really quickly on your own. But don't try this unless you have lots and lots of spare time. If you are working two jobs plus family please don't try this.

If you seek to improve your knowledge of Adobe Photoshop, Professor Hellmuth will be glad to provide you tips on what books are best, indeed a comprehensive review of all the key books is part of this course. If you are clever you can obtain a student discount and buy Photoshop at about $280 for a full version. We can not guarantee any discount since we don't sell Photoshop, but we understand that participants have obtained student discounts by using the BGSU e-mail that they receive as part of this course.

This course describes for you the portions of Adobe Photoshop that a digital photographer needs to know. At this point again, it's your own practice, practice, until you can do it in your sleep. That's how we learned it. You, however, have an advantage. There are books available today, combined with a photographer-instructor (Hellmuth) to provide a plan and a schedule.

Digital photography course students at Malta University

You need to know how to operate a computer; Mac tends to be more popular in this field of work, but PC is quite good as well; we use both at FLAAR.

Since this course is dedicated to teaching you about digital photography, it is not required that you have background in this beforehand. It is our job to provide the reading and reference material to serve as your background.

This is not a course on color theory, nor on detailed color management (we just took such a course ourselves to see how it was organized; the course alone cost over $3,000). However yes, we do cover color management as it relates to digital photography. Coverage means guided reading, an extensive annotated list of sources, and annotated background research from our staff over the last two years all nicely presented to you as one of the FLAAR reports. Three booklets and two books on color management by color scientists are available from bookstores, so it is not necessary to reinvent the wheel.

If there are too many applicants then we may have to set other entrance requirements to limit class size.

What this course does not intend to cover

Above we listed the first thing this course does not cover, namely physics (the insides of computers and the inner secrets of voltage inside a digital camera) and chemistry (the hidden recipes inside inkjet ink and in the diverse layers of inkjet media).

Since there are over a dozen 3-to-5-pixel cameras, a dozen medium format scan backs, and four tri-linear scanning backs, we are obviously unable to provide a training manual in each specific camera. We will tend to select a sample of each range and feature them. This is because we will discuss the cameras as a class: what performance can you expect from each level of equipment. How will it affect your business, positively and negatively, if you have x, y, or z make or model of camera? So it covers more of a business-plan kind of discussion. In other words, you need to understand which camera is best for your business. Plus, how much can we produce if our budget only allows x, y, or z class of digital camera.

So please do not ask us how to do macro-focusing on the Widget 4000 Digomatic camera.

You will notice that only in one learning unit do we discuss scanning or scanners. That is because this is a course on cameras, lenses, and photography. Ironically Professor Hellmuth's original background in digital imaging is precisely in scanning (of 35mm, medium format, and large format on flatbed scanners and film scanners). FLAAR is equipped with Creo (Scitex) EverySmart flatbed scanners as well as is the only university in the US with a Cruse reprographic scanner-camera for digital fine art giclee photography.

Resources provided by FLAAR at BGSU: material already prepared for you.

Over the last three years of preparation for this course we have finished more than 30 reports which are now the chapters in the course textbook. This system of providing the students the textbook in PDF format was because no textbook has yet been written on intermediate through professional digital photography. The few available books are on entry-level point-and-shoot for family weekend photography. FLAAR + BGSU is dedicated to a more professional perspective.

For this upcoming course the previous FLAAR textbook chapters have been updated, expanded, and enhanced with more illustrations. Considerable updating has incurred as a result of Professor Hellmuth spending so much time at Photokina tradeshow in Cologne, Germany and then at PhotoExpo in New York. Additional documentation will come from PMA 2004 during the course. Actually an entire month of updating took place while Nicholas was out on location in Guatemala doing digital photography during November 2003. He will again be in Central America just before the course starts in January 2004.

Dr. Hellmuth at Creo booth at PMA 2003 tradeshow

Video Resources

Receiving video over the Internet is not yet a functioning technology unless you have a T3 line or at least T1 or similar. So far the massive costs of preparing the course in video format or in interactive CD format have been prohibitive. However, for the Interactive Option portion of the course we will experiment with a Web cam so that you can see the FLAAR and BGSU studio facilities and equipment.

Interactive Option
This upcoming 2004 course we will be adding an Interactive Option so that we can offer critique on your own digital photographs if you wish. You do not have to sign up for this option at the start; you can sign up later. There is no added cost to have your own photographs critiqued by the teaching staff. We will teach you how to prepare and send your photos to us via the Internet.

Class Enrollment and Credit

It is not required that students have an affiliation with a college or university to enroll in this course.

But if you absolutely need course credit we can see if the paperwork can be arranged. To take this course as academic credit is easier if it is Independent Study back at your home college or university. If you include the Interactive Options then Dr Hellmuth can sign the Independent Study paperwork as your instructor.

So far, most of the people who have shown interest in the course are people already out in the real world working. This is why we decided tentatively to offer the course as a regular training program. This also lowers the price someone, namely a price as non-credit, where you attend the class (via the Internet) as you would any seminar, conference, or other program of instruction.

Cost

We checked around to see what other universities and institutes charge:

One place offered a six day course at a tuition of $895, lab fee $200 = $1,095 for a week. The lowest program at this institute was $720 total for a single week.

Another photography school charged $1100 for a week. Their web site did not reveal what a longer course might cost.

A third institute charged $925 plus digital lab fee of $95 just for Photoshop for photographers, $1,145 for how to print digital photographs and actually did not really have a real course on digital photography (only on how to use Photoshop).

Why the high price: all the above institutes are basically commercial. FLAAR is a non-profit educational institute and BGSU is a state university. Our goal is education, not a commercial business. We just need to cover the actual costs of preparing and delivering the course. Preparation has been intensive and several staff members are part of the team assisting Dr Hellmuth.

No lab fee; no application fee; no other hidden fees.

Actually a hobby photographer from San Francisco came all the way to Guatemala to take the summer version of this course in person. He said he could not find any other digital photography course in America which offered as thorough a program.

Course Grading

So far, everyone who has asked to sign up is already out in the real world either raising a family or working at a job in industry: repro shops, educational institutions, photo studios, fine art glicee, and a wide range of other professions.

In other words, there are no “students” who need course credit. Hence we can avoid “grading.” So no tests either.

Subsequent Courses

Digital Photography is part of an expanding program. There is absolutely no requirement that you take any additional course.

Direct Access to Nicholas Hellmuth

Dr Nicholas Hellmuth has personally prepared all the material for this course. Yes, naturally his staff will handle many aspects, especially signing you up and all the paperwork. Graduate student assistants handle the day to day operation of the course and especially the interactive options and critique of your photos. But Nicholas will be behind the scenes supervising.

One dedicated telephone number will be assigned for this course to those who wish the Interactive Option. This way you can speak to the staff in person. We will have certain hours during the workday (for those who can call from work) and other hours during evenings (for those who should not call from their workplace).

There will be times when Dr Hellmuth is in Germany, as well as possibly teaching photography in other locations, at his other university in Guatemala, attending conferences or off consulting. During these times he is constantly gathering additional information on digital photography, so the course is updated from these locations on a weekly basis. When he is at other universities, access to him will primarily be via e-mail. Occasionally he goes to remote areas for digital photography on location; some of these areas, even in the USA, have no e-mail access, but usually such a location shoot is just for a few days. Audra Magermans and/or Martha Martinez run the course when Nicholas is not situated at his desk or in his studio.

Signing Up

There is no requirement that you be a student in the traditional sense, the course description is more important than the course number.

Applications should come to Continuing Education International Programs (at BGSU): toll free 877 650-8165, fax (419) 372-8667.

Difference between the BGSU version and the UFM version

The difference is that the BGSU course is introductory through intermediate to professional, whereas the UFM course is introductory level to intermediate. The UFM summer course is in-person in Guatemala in the summer; the BGSU course is worldwide via the Internet.

Unique aspect of this course

This is the only course on digital photography that includes documentation and then follow-up with direct broadcast from PMA '04.

This course offers an instructor who has published in National Geographic, in coffee table books in Japan and Austria. He knows 35mm, medium format, and has used 4x5 and 8x10 large format cameras for years.

Although we discuss the total range of all camera sizes and shapes, the actual focus of this course is on Nikon, Canon, Hasselblad, and normal Minolta, Fuji, Sony digital cameras that you can easily afford. Indeed that's why most people take this course, to learn what is the best digital camera for the least amount of money. Indeed one thing Nicholas can document: don't get megapixel image: size is not everything. Your photo, with your creative vision, with your own basic digital camera, will improve in aesthetic value during this course.

Nikon D100 digital camera

This course is an unprecedented opportunity to learn about state of the art digital cameras, lenses, digital imaging software, digital lighting, and all in the convenience of your office or home.

We encourage you to be creative, to express your own photographic vision. Usher in a new perspective to your photography, whether you are beginner, intermediate, or pro, you are cordially invited to explore, experiment, and enjoy digital photography with us.

If you wish to meet Dr Hellmuth in person, once you have signed up for the course, we will provide the list of photography and wide format inkjet printer trade shows where Nicholas can always be found.

Downloads

The abstracts of all the learning units, illustrated, are available as an automatic download at no cost. These abstracts are in full color in Adobe Acrobat PDF format.

To Sign Up

Course material will all be in English via the Internet version, or in Spanish in Guatemala. You can correspond en español oder auf Deutsch. Both Dr Hellmuth and Audra Magermans are tri-lingual. Martha is bi-lingual.

If you want to sign up for this course via Continuing Education, BGSU click here

Two versions of this course are available: mid-June into mid-July 2004 in person, in Guatemala with Professor Nicholas Hellmuth, primarily in Spanish (course material, however, available in English). To sign up for the course in person in Guatemala, do that via ctpid@ufm.edu.gt

To sign up for the Internet version, Jan-Feb 2004, this is via BGSU.

Nicholas Hellmuth's photographs can be seen on www.digital-photography.org. His archaeological photos are on www.maya-archaeology.org

Learn Digital Photography Online







Registration now being accepted for Dr. Nicholas Hellmuth's next online digital photography course.

Take either of the following courses without ever setting foot inside a classroom.

- **DP 100 - Achieving Quality in Digital Photography**
  This course will develop your creativity and show you how to use digital imaging to produce astonishing images.

- **DP 200 - Taking Digital Photography to the Next Level**
  This is a production-oriented course that will teach you to produce digital images that will help you win exhibits, earn a living as a professional, and in general, create images that make an impact.

Name: _____

Soc Sec No. _____ Date of birth _____
(or passport number if outside USA)*

Home Address _____ City _____

State _____ Zip _____ Country _____

Organization _____

Business Address _____ City _____

State _____ Zip _____ Country _____

Business phone _____ Fax _____

Home phone _____ Email _____

Registration:

- ☐ **DP 100 Achieving Quality in Digital Photography** **$595.00**
  Session 1: January 12-March 5, 2004
- ☐ **DP 200 Taking Digital Photography to the Next Level** **$795.00**
  Session 1: March 15-April 16, 2004
- ☐ Both Courses (Save $295 when you enroll now!) **$1095.00**

☐ Send me information on future classes

Method of Payment:

- ☐ Check (payable to BGSU)
- ☐ Purchase Order # _____
- ☐ Credit Card

☐ VISA ☐ MasterCard ☐ Discover

Card No. _____ Exp. Date _____

Refunds are subject to BGSU cancellation polices.

Easy Ways to Register for the On-Line Course

Call: 419-372-8181
or toll-free 877-650-8156

Fax: 419-372-8667

Mail: Continuing Education,
International & Summer Programs
40 College Park
Bowling Green State University
Bowling Green, OH 43403 USA

You can register at any time but once class is filled we can accept no more registrations, so it helps to register today.

• To comply with the Hope Scholarship and Lifelong Learning Tax Credit legislation, BGSU now requires all credit and noncredit students from the USA to supply their Social Security number when registering for classes. A Social Security number is not required for students residing outside the USA. These students should substitute a passport or equivalent number.

Bowling Green State University is on EO/AA employer and educator.

KEYCODE
11030602

Download PDF Preview of the Course Units | Download Syllabus | Request more information

DP 100: Achieving Quality in Digital Photography
(Curious & Intereted through Intermediate levels)

SLR 35mm Digital Cameras

Nikon D100 Digital Camera

Sigma SD9 Foveon

History and Timeline of Digital Photography

Professional Results from Budget-Priced Cameras

Pros and Cons of Digital and Film Photography

CCD and CMOS Image Sensors

Nature Photography

Photograph Composition

Portraits: Studio and Location Photography

Architectural Photography

Digital Photography for QTVR

Equipment: On Location Photography

Computer Equipment for Digital Imaging

Camera and Computer Memory Storing Digital Files

Lighting Digital Photography

Adobe Photoshop

Software that will Help your Digital Photography

DP 200: Taking Digital Photography to the Next Level
(Intermediate into Professional Digital Photography)

Digital Image Resolution

Introduction to Digital Photography vs.Scanning

Medium Format Digital Scanning Backs

Hybrid Digital Cameras to hold Medium Format Digital Backs

Large format cameras

Lenses and Filters

Equipment: Studio Photography

Lighting Digital Photography

How to do a Rollout Photograph of a Cylindrical Object

History of Rollout Photography

Panoramic Photography for Digital Cameras

History of Panorama Photography: Circa 1840-1980

Digital Panoramic Cameras

Taking Photographs with a Reprographic Copy Stand

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