“A Lens Into Sustainability: Farms and Forests of Poland”
3 credits,
May Term 2014 (May 21 – June 13, 2014)
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Description: This course is a unique combination of communications, science, culture and history. Students will carry out daily photo and interview assignments, while at the same time being exposed to a variety of topics related to agriculture and natural resources. Content will be delivered through lectures, discussions with scientists, museum and learning-center visits, and one-on-one instruction. Participants will also experience life in Poland, from hikes in the the sub-alpine Tatras to the Old Town centers of Warsaw and Krakow. They will see commercial and educational enterprises, from farms to orchards to forests. Students will gain a basic understanding of food and fiber production in Europe, and knowledge of how climate, soil and geography interact to affect agriculture. All this in addition to becoming skilled photographers and improving their presentation skills.

Course Objectives: On completion of this course students will be able to:
- Make photographs at an advanced technical level, to accurately record biological, cultural and environmental topics.
- Express, through creative photography, the process of investigation and discovery in fields related to natural sciences.
- Research, prepare and deliver a high-quality, photo-rich, documentary Powerpoint presentation.
- Compare and contrast the affect of economics, politics, education and natural resources on life in Poland and the United States.

Academic content:
- Photography - the universal language - will be taught by the photojournalist instructor in whole-group, small-group, and one-on-one settings. Emphasis will be on developing technical expertise and effectively using all camera and lens controls. Learning technical and creative use of light, and effective composition, will help students accurately communicate. Each small group will develop a high-quality presentation of scientific and cultural topics.
- Science – the universal process of discovery – will be taught primarily by content experts from the Warsaw University of Life Sciences. Students will be given one-day orientations in many fields: forest ecology, environmental education methods, forest management, wildlife, livestock, fruit production, and ornamental horticulture. Scientists from several federal agencies in Poland will also deliver information.
- History – unique to Poland, unique to the U.S – will be delivered formally in lectures of history, economics, art and political science. Many tours of historic and environmental sites and informal meetings with Polish farmers, students and forest workers will convey additional cultural information.
1 - Academic content of this course and how it relates to Poland

This is hands-on, down-and-dirty. Also eye-opening and introspective. It combines:
- Photography – the universal language
- Science – the universal process of discovery
- History – unique to Poland, unique to the U.S.

The systems which produce food and fiber to feed and shelter the world’s population have evolved over time and place. They’ve been shaped by geography, climate, natural resources, culture, education and politics. The United States is a new country considered to have a successful, stable, efficient and profitable agricultural system (though with many new challenges). Poland, with a similar landscape over much of its territory, is also successful. But its history offers a contrast in how it has evolved, especially over the last century.

The Land Grant University system of the United States initiated by Abraham Lincoln marked its 150th anniversary in 2012. It is undeniably responsible for many of the productivity gains in our forest, agriculture and horticulture production. This system is largely unique in the world and to today’s younger generations this history is generally unfamiliar.

Poland was shaped largely by the Soviet rule from 1945-1989 and its agricultural system was a combination of private and collective farms. The Soviet impact on Polish social and cultural life was much greater. To the current generation in Poland that system is in the recesses of history, fading into the background the same as young Americans’ understanding of how Land Grant research-teaching-extension shaped food production and rural life. Through tours of research facilities here and in Poland, interviews with natural resource specialists, documentary photography, and weekly writings, students will acquire knowledge of how the two countries’ natural resources, culture, economy, and education were shaped.

I recently made my fourth visit to Poland, and experienced the vibrant success of their two decades of freedom. They are creating sustainable models of agriculture and forestry. Plus they’ve made huge leaps forward in economics, environment, and major building programs of schools, churches, cultural centers, hotels and roads. How does this compare with the recent infrastructure building boom in the U.S.? In contrast, many of their farms resemble America’s of two generations past; small family operations with crops and livestock, half of which only supply the needs of the extended family.

This course is a unique combination of communications, science, culture and history. I am a photojournalist, trained in science, working daily to tell research stories – using photography - to the average person. The first line of Wikipedia’s description of the topic says, “Photography is the art, science, and practice of
creating durable images...” The basis of this course is that photography is a universal language. It combines art and science, is used to interpret culture and science, and has overwhelmed us in the digital age. How we create, use and interpret images is as important as our language skills, but is largely left out of formal education. In the age of Instagram and Facebook, everyone is a published photographer, this course will provide the insight and practice needed to ‘take’ a memorable (durable) image. But as the legendary photographer Ansel Adams thoughtfully instructs us, “You don’t take a photograph, you make it.”

Students will receive three weeks of training in photographic skills and interview techniques. We will creatively - and with increased technical expertise - photograph plant, human, cultural and landscape subjects. Participants will learn to ‘make’ a photograph by; looking at the subject from different viewpoints and distances, asking ‘what is the subject?’, thinking about the intended audience, composing, shifting the background and controlling the light. At the same time, students will see and hear about current work to improve food and forest production in Poland, and efforts to improve the environment following the polluted era of industrial growth following WWII. During this process they will be exposed to several modes of science/environmental education as practiced in Europe.

Pre-departure, students will receive a basic orientation in visual communications. We will then visit a University of Minnesota Research and Outreach Center for a taste of science. A researcher will summarize a current project (apple breeding or forest response to climate change) and describe how it aims to improve our quality of life. Students will interview the scientist and photograph the project, led by the instructor. Finally, I will initiate thinking about what a Land Grant University means to each major represented in the class.

In Poland, participants will tour university and federal ‘experiment stations’, and hear from scientists conducting research at these farms, forests, and orchards. They will visit a private farm, community allocated garden, and a farmer’s market. Once each week we will visit the Polish equivalent of an environmental learning center, to see how knowledge is transferred from University level to Polish children and the general public. At each site – after a tour with a resident expert – we will selectively photograph the plant, animal and human subjects in order to tell a compelling visual story of scientific discovery, successful enterprise, or cultural treasure. The course leader will work one-on-one and with small groups to help students learn photojournalism techniques useful to capture and interpret what is seen. Six evening presentations by the instructor will focus on how to photograph specific subjects; forests, small grains, apples, cityscapes, landscapes, and livestock. Students will carry out almost daily photo assignments, as individuals and in small groups that change during the course. Once a week each student will write a short paper that demonstrates insight of science, culture, history or photography. In small groups during the last week (and post-return if necessary) they will combine their new knowledge of science and communications to create a Powerpoint presentation of words and images that summarize their observations of natural, scientific,
Student Learning Outcomes:
By interviewing and photographing scientists, students, farmers, and teachers in Poland, students will learn to better understand diverse philosophies and cultures within and across societies. This, and the major assignment of preparing a Powerpoint presentation in small groups, will assist them to communicate effectively. Through tours of university and federal research facilities, led by Polish and U.S. researchers, participants will better understand the role of creativity, innovation, discovery, and expression across disciplines and be more prepared to select objective sources of information for making decisions. This will be enhanced by the wide variety of topics the students are exposed to: fruit orchards and farm crops, sustainable forests used for recreation/wildlife/harvest, and private farms, gardens and local produce markets that create a sustainable food supply. The range of topics presented and high credibility of the experts will assist students to locate and critically evaluate information, and with a global perspective. The economic demand for food/fiber and society’s quest for environmental improvement, highlighted via numerous tours, will help students to identify, define, and solve problems from a personal, country-specific, and global perspective. The final, group presentation combined with the development of a critiqued, individual portfolio will demonstrate they have mastered a body of knowledge and a mode of inquiry in addition to personal creativity. Successful interaction with people in Poland from urban to rural, leading scientists to farmers and foresters, will demonstrate students’ acquired skills for effective citizenship and life-long learning. A visit to the U.S. Embassy in Warsaw and information from the scientific/cultural attaché (or assistant) will officially outline the complexities involved in global knowledge transfer.

2 - Preliminary list of all possible program excursions and site visits

Pre-departure:

U of MN Horticultural Research Center and Arboretum, Chanhassen. http://www.arboretum.umn.edu/default.aspx  Tour of apple orchard and plant breeding laboratory and greenhouses. Presentation by apple breeder David Bedford and/or technician Leszek Miroslawski. 100-year program of apple improvement, enabled by continuous Land Grant funding. Successful varieties from Haralson (1922) to Honeycrisp (1991) to SweeTango (2009), well known fruits of University research. http://www.apples.umn.edu/ Students will interview the scientists and photograph the research, including close-up photos of blossoms, pollination techniques, as well and whole tree and orchard views, led by instructor. Short walk in Arboretum, highlighting varieties developed by the University of Minnesota (azaleas, dogwoods, roses). Finally, instructor’s presentation: “Photography of Apples, From
Haralson to Honeycrisp” (fruit, trees, commercial orchards, harvest, breeding research). This visit will be mirrored in Poland at a Warsaw University of Life Sciences (SGGW) research center.

or

Overnight to the U of MN Cloquet Forestry Center. [http://cfc.cfans.umn.edu/](http://cfc.cfans.umn.edu/) Tour of forestry research, continuous since 1909, and of National Science Foundation funded B-4warmed climate change research. [http://cfc.cfans.umn.edu/Research/index.htm](http://cfc.cfans.umn.edu/Research/index.htm) Walking interview and wagon tour of the Center with forest manager Artur Stefanski. Photography of forest types, wetlands, different species of native trees-shrubs-flowers, and of research underway. Students shoot photos individually, directed by instructor. This visit will be mirrored in Poland at a Warsaw University of Life Sciences (SGGW) research center and a forest service site in the Tatra mountains.

and

U of MN St. Paul Campus:
- A one-hour primer on visual communications
- Short review of U.S. Land Grant system in context of U of MN
- Personal impact of WWII in Poland on one U.S. family
- Students share their experiences with and perceptions of:
  - Agriculture and gardening
  - Lakes, wildlife, forests and other natural resources
  - Post-WWII Europe
**Poland: Sites associated with SGGW, the Warsaw University of Life Sciences**

- Skierniewice, SGGW Experiment Station-agronomy (stay at Rogow)
- Warsaw: SGGW museum, Poland history & art
- Warsaw: SGGW, [Wilanow Experiment Station](http://www.sggw.pl/?lang=en): orchard & livestock research
- Warsaw suburb, Lesnictwa: [Forest Research Institute](http://ibl.uw.pl/pol/)(IBL) tour of research facilities, forest education for school children. (dinner: Magdalenka, culture)

**Poland: cultural, historic, social and other excursions:**

- Ex-urban Warsaw, tour & picnic at community garden plots (Dziatki) of Prof. Emeritus Albert Dudek
- Warsaw: Old Town tour (history/culture) [http://whc.unesco.org/en/list/30](http://whc.unesco.org/en/list/30)
- Auschwitz concentration camp (history/religion), 30 miles west of Krakow [http://en.auschwitz.org/m/](http://en.auschwitz.org/m/)

**Poland: LZD, Krakow Agricultural University. Forest service, near Krakow.**

- Krakow: Krakow Agricultural University, LZD field crops & potatoes experiment station near Krakow
- LKP (Poland Forest Service) Puszcza Niepolomnicka forest [http://en.wikipedia.org/wiki/Niepo%C5%82omice_Forest](http://en.wikipedia.org/wiki/Niepo%C5%82omice_Forest)
- Private farm visit, near Zakopane
- Farmer’s market, Krakow
- Warsaw: federal district forest Celestynow
4 – Academic qualifications of instructor related to course topic, international experience, language skills, and group leadership experience

I have a BA in photojournalism and MA in science journalism. My position is unique, as a photojournalist with the University of Minnesota’s Agricultural Experiment Station (MAES) I document the discoveries of faculty in five colleges: primarily CFANS but also CBS, CVM, CE+HD, and Design. I work daily with scientists and their graduate and undergraduate students to capture the essence of their research via photos and place the images in media, from WWW to magazines, posters, scientific journals, garden catalogs and billboards. I also make it my job to show the impact University research has on the lives of everyday people. This course crosses many boundaries, and will be listed as in the Environmental Sciences, Policy, and Management (ESPM) major, though my home is not in a department or college, but within interdisciplinary MAES.

Earlier in my 38-year career with the University I taught agricultural journalism and the department’s most popular course, ‘functional photography,’ for design and plant science majors. I also instructed 4-H youth and adult leaders, and did photo workshops for extension faculty. I hold the rank of Extension Professor and am in the PA classification with continuous appointment.

My University assignments take me to all parts of Minnesota and I am intimately familiar with our system of Research and Outreach Centers. Not long ago they were called ‘experiment stations’, as they still are in Poland where the higher-ed system lacks the outreach mission of our Land Grant Universities. I have worked on University projects in many countries: Morocco at the Institut Agronomique et Veterinaire Hassan II, in Poland with an Extension project helping privatize Soviet-era collective farms, and in Chile, New Zealand, Germany, Kenya and Tanzania documenting specific research projects.

In 1987, ’88, ’89 and ‘90 I taught 2-week courses in Pakistan and India. These photo, video and writing workshops were for agricultural and horticultural employees in the equivalent of their extension system and were sponsored by the World Bank and USAID. The workshops were structured much the same as the proposed course, with on-location photography by each participant of cotton fields, irrigation, vegetable and fruit crops, and then editing and assembling them into a presentation. I also carried out, in country, a 3-month evaluation of communications in the Pakistan system of agricultural lending.

Directly related to this course proposal is my photo exhibition in 2012-13, in multiple venues in Poland, of posters documenting University of Minnesota discovery and celebrating the 150th year of the U.S. Land Grant University system. [http://sggw.tv/?p=767](http://sggw.tv/?p=767) This was my 4th trip to Poland (1973, 1980, 1991, 2012) and my third contact with the Warsaw University of Life Sciences. Their vice president for international relations (previously department head of horticulture) asked me to initiate a relationship between our two universities.
My mission to Poland had almost the reverse affect I expected. I went to show off the great discoveries of our system, but came away astounded at the new economy of Poland (only EU country that hasn’t had a decline in GDP), investment in university and federal research, and renewed excitement within their education system. Not to mention many new campus buildings and cutting edge programs. Poland is the new Europe, a success story a country with a vibrant past and bright future. Our students will have the opportunity to learn first hand what life was like during communism, discuss in depth the transitional period and see and experience a new era for Poland. There will be time to engage with current events such as the recent acknowledgement within Polish society of missing generations of Jewish life and culture. These topics will compliment the course’s focus on agriculture, forestry and the environment, encouraging students to work between disciplines.

I have no Polish language skills but have not found this a significant hindrance in my four visits. I certainly wish I did, as a mark of respect. For middle-aged Poles, Russian was the required second language, but English the underground – and preferred – language. In 1980 I gave a presentation to an SGGW extra-curricular English class on how to interpret southern U.S. dialects (the TV show ‘Dallas’ was popular).

5 - Assessment of student performance in the class

Your final grade will be determined by the following:

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<tr>
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<th>Individual</th>
<th>Small Group</th>
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<tbody>
<tr>
<td>Pre-departure: attendance &amp; participation</td>
<td>5%</td>
<td></td>
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<tr>
<td>Daily photography</td>
<td>20%</td>
<td></td>
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<tr>
<td>Daily participation</td>
<td>20%</td>
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<td>Weekly, 1,000 word papers</td>
<td>10%</td>
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<tr>
<td>Powerpoint: contributions (group’s self-evaluation)</td>
<td>15%</td>
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<tr>
<td>Portfolio</td>
<td>20%</td>
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<tr>
<td>Post-return: present Powerpoint program (instructor evaluation of final program)</td>
<td>10%</td>
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<tr>
<td>TOTAL</td>
<td>75%</td>
<td>25%</td>
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Students are expected to participate in all pre-departure, in-country, and post-return activities. These include:
- Pre-departure: at least one full-day, off-campus tour (possibly overnight)
- Pre-departure: 2-hour orientation on campus
- Poland: daily field trips or tours
- Poland: daily photography by each student during field trips
- Poland: daily interviewing/questioning researchers and tour leaders
- Poland: small group planning and preparation of a Powerpoint presentation of words and images to summarize observations of key natural, scientific, historic,
educational, or cultural attributes of Poland. Program should include a minimum of 50 images of which at least 15 should be text+image slides. Include detailed speaker’s notes and use them to present the 10-15 minute program (which does not include questions from the audience) to the entire class post-return.

- Poland: three, 1,000 word essays, in the order below, submitted on-line and due by midnight on Fridays, May 30, June 6 and June 13:
  - Describe, analyze and discuss the visual impact of a specific photographic technique you learned (composition, macro photography, contrast control, depth-of-field....)
  - Compare two equivalent subjects from the pre-departure and Poland portions of the trip (education system, research facility, plant species, ecosystem...)
  - Critique, compare and question a slice of Polish culture and history with that of your own. (Immigration, religion, discrimination, education, movement from farm to city, affect of war...)
- Poland: individual portfolio of high-resolution photos, approximately one each day but a minimum of 20), with caption of less than 25 words, submitted on-line by midnight on Fridays, May 30, June 6 and June 13. This is your visual journal of the trip, so work on it each day.
- Post-return: finalize the Powerpoint presentation with your group, if not completed in Poland
- Post-return: each small group gives their Powerpoint presentation to the class.

Other expectations:
- Ability to walk in varied conditions; through farmyards and over fences, on mountain trails, into logged forests, and on city sidewalks, rain or shine.
- Suitable attire for outside; practical, comfortable clothing and footwear. Jeans, work clothes are recommended for most of the time, clothing that you could lie in the dirt with. But a third of our tours will be cultural, urban and more refined so also bring everyday, casual clothes. Other useful items include a raincoat, sunscreen, and baseball-type hat to keep the sun off the camera’s viewfinder and minimize rain/drizzle on the camera when you’re shooting.
- Curiosity! If you enjoy being exposed to new topics, learning practical science, meeting new people, seeing a different world, and capturing it all in photos then this is for you.
- A digital camera manufactured within the last 5 years. A digital single lens reflex camera (SLR) is much preferred, but not required. (If you are considering purchasing one, now would be a great time to have it.) Camera phones or cameras less than 5 megapixels are not acceptable. Check with instructor early, and we’ll be testing them out pre-departure. Charger and 2 batteries for your camera. Two memory cards, each large enough to hold a minimum of 100 images at the highest resolution of your camera. All of this is reviewed during our pre-departure session.
- A laptop computer with a memory card reader and a photo-editing program is highly desirable. Ideally participants will share, so within each small group there is at least one laptop. If you have one, please bring to the pre-departure sessions.
- Pre- and post-trip activities require attendance and each counts for 5% of grade. If you do not assist your small group in preparing your final presentation you will not receive the full 5% of post-trip credit.

Resources/readsings:
- **Land Grant University proposal.** Justin Smith Morrill. 1858
- **History and current components of the Land Grant University system.**
- **Minnesota Hardy.** (authored by instructor, copies will be provided)
- **Destination: Poland.** Lawecki, Tomasz and Kunicki, Kazimierz. 2011.
- **Michael Freeman’s To Digital Photography Tips,** Freeman, Michael. 2008
- **Isaac’s Army: A Story of Courage and Survival in Nazi-Occupied Poland.** Brzezinski, Matthew. 2012.
- **A Traveller’s History of Poland.** Radzilowski, John
- **No Greater Ally: The Untold Story of Poland’s Forces in World War II.** Koskoden, Kenneth K. 2009.

Required readings yet to be developed:
- **Politics of Time: Dynamics of Identity in Post-Communist Poland.** Koczanowicz, Leszek
- **Church and State in Communist Poland: A History, 1944-1989**
- **Poland.** (Eyewitness Books, D-K Publishing). Majewski, Jerzy S.
- **Looking at Poland.** Pohl, Kathleen