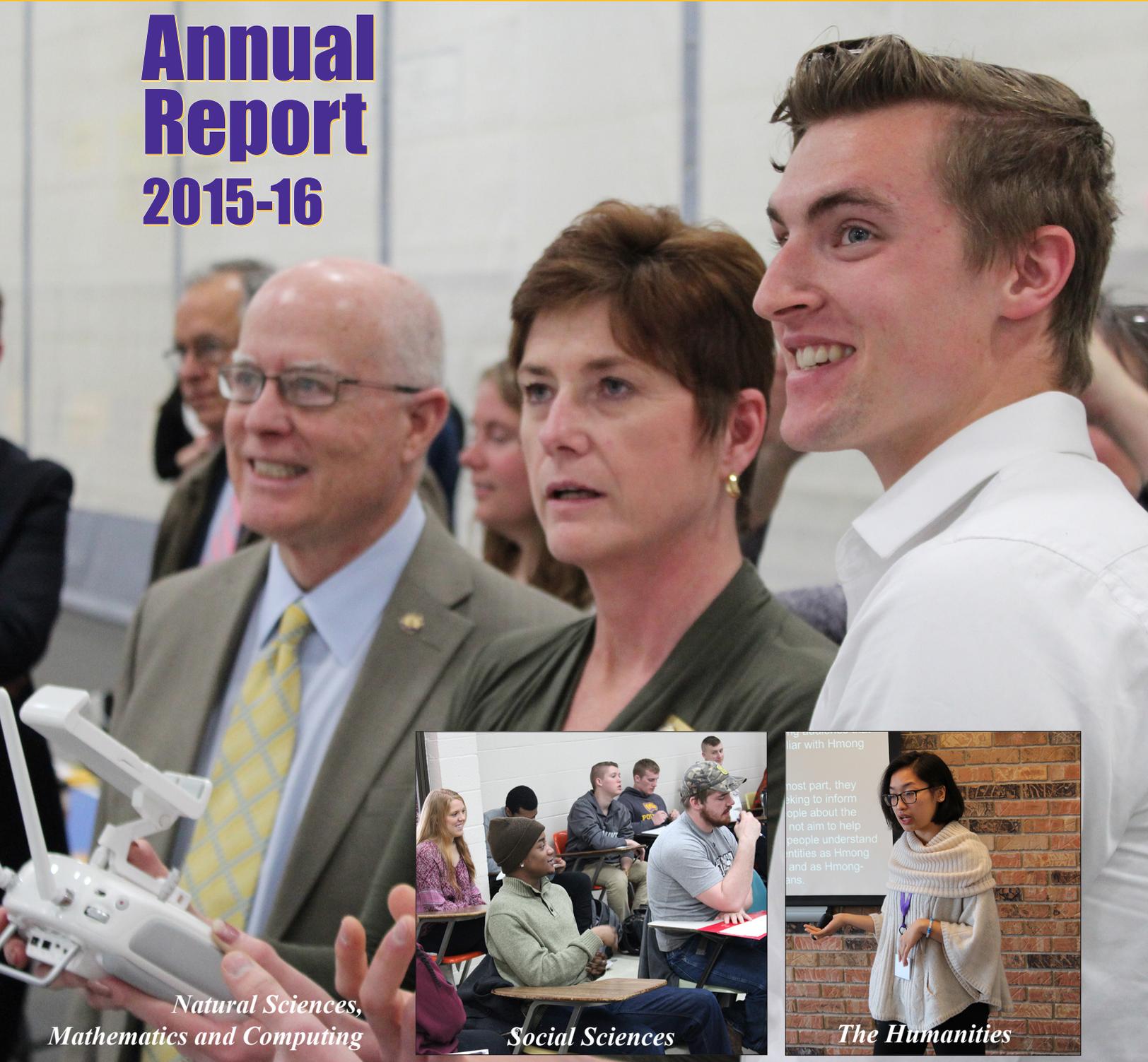


College of Letters and Science

The College-at-the-Core

UW-Stevens Point College of Letters and Science • Annual Report 2015-16 • www.uwsp.edu/cols

Annual Report 2015-16



*Natural Sciences,
Mathematics and Computing*



Social Sciences



The Humanities



University of Wisconsin
Stevens Point

College of Letters and Science

Mission Statement

The College of Letters and Science mission is to serve the region, the state and the world through ...

- Academic excellence that fosters students' career preparation, professional expertise, civic responsibility, personal development and global adaptability
- Research and learning that generate new knowledge and new insights, which through their application, promote economic development, community well-being, personal fulfillment and lifelong learning
- Dedication to the public good through leadership and service grounded in the foundational ideals of liberal education, robust academic majors, a vibrant general education program, and an overarching embrace of academic and personal integrity
- Adherence to the Principles of Excellence established for *Liberal Education and America's Promise* (LEAP) by the Association of American Colleges and Universities



Students Stephen Schuessler (above) and Ross Thorn demonstrate their augmented-reality sandbox, which aids in contour map interpretation.

COLS by the Numbers

- 13 departments
- 10 centers and affiliations
- 27 majors
- 43 minors
- 170 tenure-line faculty
- 60 academic staff
- 60 classified staff



On the Web

To view past Annual Reports from the College of Letters and Science, visit www.uwsp.edu/cols and look for "Annual Report."

Student Dwight-Anthony Hayes (left) presents The Fight for Egyptian Artifacts and Heritage.

Contents	
COLS Mission Statement	2
COLS By the Numbers	2
Letter from the Dean	3
COLS Roadmap	4
The Humanities	6
Natural Sciences	8
Natural Sciences	10
The Humanities	12
Math and Computing	14
Natural Sciences	16
Promotions and Retirements	16
COLS Development Report	18
Award Winners	18
COLS Majors, Minors and Facilities	19
Undergraduate Research Symposium	20

On the cover: (Top) Student Chase Bayer demonstrates drone use to Rep. Mary Czaja and UW-Stevens Point Chancellor Bernie Patterson. (Right inset) Ta Xiong presents *Hmong-American Literature: Discovering Identity Through Written Texts* at the UW System Symposium for Undergraduate Research and Creative Activity. (Left inset) Students in Krishna Roka's sociology class discussed intergenerational issues with local baby boomers.

Letter from the Dean

Partnerships, Advising and Career Opportunities for our Students

"Partnering." This word is used frequently as we ponder our role in a new world of expectations for the public university. BusinessDictionary.com defines it as "Establishing a long-term win-win relationship based on mutual trust and teamwork, sharing both risks and rewards." **Trust, teamwork and sharing are critical.** In the public academy we feel increasing pressure to demonstrate how we cooperate and bring our expertise and message to meeting the needs of our partner communities.

Here in the College of Letters and Science we take this charge seriously. **We are stewards, and we cannot afford to live in a vacuum of what is assumed to be our students' greater interest.** Our college consistently demonstrates our commitment to outreach to our partners through relationships with the Medical College of Wisconsin (sharing a faculty position), local information technology interests (positions, resources and curricula), in aquaculture and aquaponics (through the Northern Aquaculture Demonstration Facility and Red Cliff Tribe in Bayfield, and with a private firm in Montello), in cooperation with the needs of Wisconsin in professional health care training, molecular biology, genetics and chemistry (the new science building), and in citizen outreach and student placements in the Social Work major and Criminal Justice minor. Our recent resounding success with the Sentry Endowment funded two new tenure-line positions and a new curriculum in Data Analytics. This is a direct and intentional response to exactly what our business and government offices are requesting. As I work to assist the university in developing partnerships with our community, region and state, the central question we ask is: "How will this relationship advance the status and employability of our students, and how can we help our community address its continuing needs with the expertise and brain trust at our university?"

We find ourselves at a critical point in the history of public higher education. Throughout this annual report, you will find stories, statistics and data showing how much we do, for whom we do it and how innovative we feel it is. What is not often clear from such data is the intangible question ... **how does it change our student's lives?** Those of us charged with providing and assessing the quality of a public higher education, often find ourselves in a quandary in our ability to answer this question. We know it dramatically changes their opportunities and future earning power. However, often our graduates do not obtain immediate employment in their chosen area or go to graduate school, but work in positions that may be only tangentially related to their major area. It is hard to track these students.

To assist our students in gaining employment, qualifying for and attending graduate school, or to place them into internships, cooperatives and other tangible experiences upon graduation, we need to do a better job in using our data, partnerships, alumni and advising in preparing them for the often circuitous journey ahead. Toward this end, we worked with the Student Government Association and the Board of Regents this past year to obtain a differential tuition fee to be used solely to **assist our students in academic and career advising, and for giving us funding for extra sections of classes in otherwise tight seat placement curricula.** The university has reorganized its academic and career advising around a "satellite model." The hiring of six new professional advisers for our satellite office (the COLS Academic and Career Advising Center), with special funding giving students more class sections, gives us confidence we are moving in the right direction. We are dedicated to assuring that our students get not only the best advising and career advice for success after college, but have a true opportunity to explore career options within their chosen majors and minors. All incoming new students are assigned a professional adviser to assist them with their department curricula, counseling them on the best opportunities available for career advancement in their fields.

Our partners, local businesses, graduate schools and future employers across the nation often identify a core set of skills that they prefer in our graduates. A national debate rages on the skills-training vs. life-training opportunities that a college degree offers. We often refer to the "Essential Learning Outcomes" promoted by the American Association of Colleges and Universities (cultural knowledge, knowledge of the physical and natural world, intellectual and practical skills, responsibility, and integrative learning) as the hallmarks of a liberal arts and sciences education. These outcomes match closely what employers request most often of our graduates; the ability to think clearly, speak clearly, write fluently, show historical perspective, understand ethics and morals, and be flexible learners). We are in the business of training ethical leaders for the future, who have both immediate and long-term talents empowering them to succeed. I am happy to report that the "College-at-the-Core" is fulfilling its mission and greatly assisting the other colleges and units on campus to provide all our students with these critical skillsets.

Sincerely,

Christopher P. Cirimo
Dean, College of Letters and Science
University of Wisconsin-Stevens Point



The College of Letters and Science A Roadmap

The College-at-the-Core

At the University of Wisconsin-Stevens Point, the College of Letters and Science is focused on the public good, promoting leadership and service grounded in a foundation of flexible and robust education. As home for UW-Stevens Point's humanities, social sciences, natural sciences and computing/mathematics disciplines, our mission is to serve the region, the state, the country and the world through education, scholarship, service and leadership training. We are indeed the "core" of the university, representing the breadth and depth of disciplines critical to a liberal arts and sciences education.

Directions

- We will be leaders in quality mathematics and science education for future generations (STEM Enhancement)
- We will be partners in health care disciplines and curricula (Healthy Communities)
- We will train better citizens and caretakers of their government (Responsible and Vibrant Communities)
- We will be stimulators of local and regional economies (Stakeholder Partnerships)
- We will be ethical leaders and promote civil discourse (Applied Ethics and Civil Discourse)

Waypoints in 2015-16

As we chart our way into the future of public higher education, the College of Letters and Science at UW-Stevens Point takes its mission and strategic position seriously, carving new paths of innovation to support the strategic plan of the university: The Thriving Communities Initiative. In particular, this past year we supported specific waypoints in our path to becoming the most responsive of the colleges, in giving our students the fundamental skills needed not only for job success, but for career and professional ethics preparation. The projects highlighted in this report are only a small sample of the collective and individual



Philosophy professor Joshua Horn delivered the annual University Evening address in October, exploring the topic of video games and their ability to cultivate virtue.

projects going on within our departments and centers, and marshaled forward by our spectacular faculty.

The New Science Building and STEM Initiatives

In response to the needs of the university and its community, and building on what has become the hallmark of UW-Stevens Point, the new Chemistry Biology Building will indeed be a sentinel location on campus. The building will be a gathering place for students in our science and mathematics departments and will service the many students in courses needed for health care professions preparation and natural resources curricular needs.

Indeed, this new building highlights our unique role in preparing scientists, enhancing offerings in the science, technology, engineering and mathematics (STEM) curricula, and highlighting the role our college plays in making the entire campus not only technologically savvy, but also giving us badly needed classroom space and a gathering space on the northeast section of campus. The lobby of this new building will highlight not only the sciences, but

indeed the history of the campus and its evolution as a top-rated science institution.

The Quality Initiative in Critical Thinking

The new effort to infuse critical thinking throughout our curriculum is imperative if we are to quantify the skillsets required of our students, as described by employers and graduate schools. As a first of its kind in the nation, this initiative will focus on the use of argument mapping as a logical and normative set of skills to be used in classes in our general education program and throughout our curricula in an intentional way. By incorporating this method of reasoning and thinking into curricula from the first to senior year, students will not only be gaining insight into a new way to polish their critical thinking skills, but learning a method of reasoning which will assist them in any course of study or career path they choose.

The Allen F. Blocher Planetarium

As a center for outreach with many years of excellence and presentation to our students and the Stevens

Point community, the planetarium is undergoing a renaissance under the guidance of new director Sebastian Zamfir. Sebastian plans to use the facility for not only the classic planetarium shows, but to incorporate data visualization from the Pejsa Observatory, and to assist the college in seeking funding to upgrade dated facilities. Possibilities abound for this outreach space with new projection applications in the life and geographical sciences, as well as for entertainment and lectures in many different fields.

The Mississippi Delta Trip

As an example of an alternative study trip, this project has become more institutionalized as a best practice in higher education, and is an example of what the dean likes to call "study-within." These alternative trips to domestic locations with a historical color give students with limited funds, who may not be in a position to pay for traditional study abroad, the opportunity for an experience that promotes a broader perspective on the diversity and pluralism of our country.

De-Extinction and the Community Lecture Series

The concept of "de-extinction" presents something of an ethical dilemma in its wide-reaching questioning of just what is appropriate in restoring species that have gone extinct in recent times. Far from a "Jurassic Park" dilemma, it is clear that habitat loss or other human-induced action has precipitated some recent extinctions. Examples include the passenger pigeon, which disappeared about 100 years ago when its habitat was lost, or the mastodon, which may have become extinct either due to over-hunting, or due to dramatic climate change (end of the last ice age). Such ethical dilemmas prove to be pervasive in not only the sciences, but throughout the business, legal, medical and environmental fields, and are examples of the kinds of "critical thinking" projects that the college promotes.

Destinations 2016-17

As the college looks to the challenges of the coming academic year, and the next biennium state budget (2017-19), we set our goals high in an attempt to address the pressing needs of not only our institution, but of the region,



state and nation. Destinations will include:

- Humanities initiatives to promote their importance through new majors, minors and centers; formalize the Center for Applied Ethics; and solidify the Civil Discourse Initiative.
- Update curricula across the college to bring in new ideas and nationally trending ideas to promote new career and professional goals.
- Support the new Academic and Career Advising Center (COLS ACAC) to full use with the new professional advisers and a model that frees faculty and chairs to focus more on mentoring and recruiting of students.
- Bring the new data analytics major forward with new endowed positions and recruit nationwide for a more diverse student body in the computer information sciences.



(Top) Biochemistry major Zak Driscoll talks with State Sen. Luther Olsen at the annual Posters in the Rotunda event in Madison. (Bottom) Psychology and computer information systems major Brian Hall discusses his research with drones with a group of regents and legislators.



University Takes the (Quality) Initiative

Faculty group looks to improve critical thinking instruction

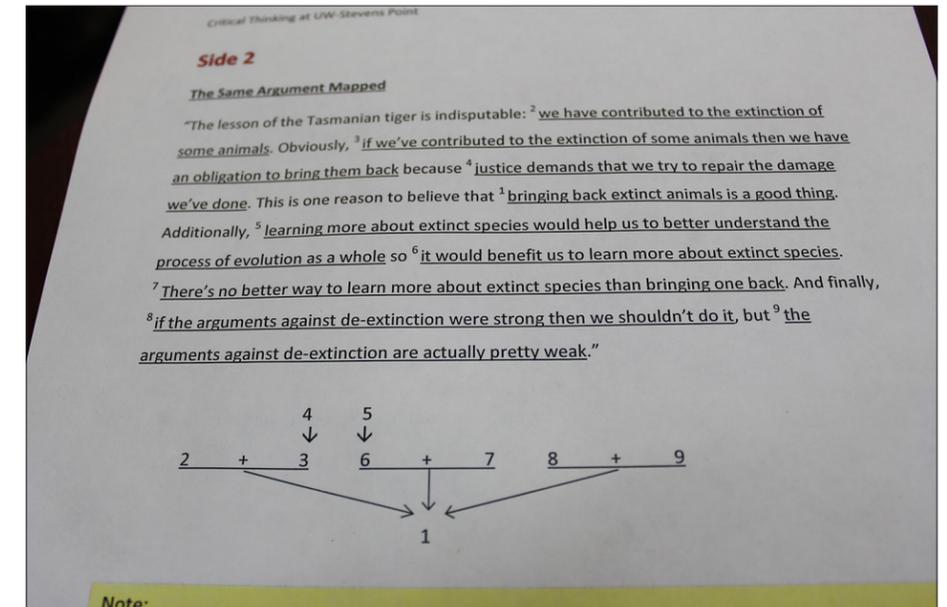
The General Education Program at the University of Wisconsin-Stevens Point provides the framework of a liberal education, equipping students with the knowledge and skills to facilitate intellectual and personal growth, pursue advanced studies, and improve the world in which they live. One of the primary outcomes of the GEP is that students will demonstrate critical thinking, quantitative and communication skills necessary to succeed in a rapidly changing global society.

A worthy learning outcome to be sure. But how is critical thinking taught? And how can the university teach it better? Tackling these issues is the aim of a universitywide Quality Initiative that involves a number of faculty from the college, including professor of history Nancy LoPatin-Lummis, professor of English Wade Mahon, associate professor of French Vera Klekovkina, and Dona Warren, professor of philosophy and assistant dean of the College of Letters and Science. A Quality Initiative represents the work an institution will undertake in support of its continued accreditation.

"The reason we're doing this is not so much that there is a serious defect in our teaching, but it's a way of responding to a very reasonable call from the Higher Learning Commission to continually improve ourselves as a way of maintaining our accreditation," says Warren.

A focus on critical thinking already had some momentum on campus, stemming from a grant received and implemented last summer. It is a fundamental learning outcome, and is a skill that can be meaningfully discussed across disciplines on a variety of levels.

And yet, Warren says, many instructors presuppose that their students have critical thinking skills instead of teaching those skills explicitly. "That's not to say they don't do things that are intentionally designed to improve their ability," says Warren. "But it's like writing – I have my students write, but



“What this Quality Initiative is designed to do is to help interested faculty master a way to teach a relatively manageable set of skills, and give them the tools to do that in a way that is somewhat similar across disciplines.”

— Dona Warren

I don't think about myself as teaching writing. That's not my expertise.

"What this Quality Initiative is designed to do is to help interested faculty master a way to teach a relatively manageable set of skills, and give them the tools to do that in a way that is somewhat similar across disciplines."

A key part of the Initiative is the use of argument mapping to provide this common framework that can then be enriched by subject-specific content and expansion. Argument mapping is a way of graphically representing the logical structure of an argument, illustrating its

conclusions, premises, subconclusions, inferential relationships and what ideas work to support each other.

"I think you can teach critical thinking more efficiently with some sort of graphical representation of arguments, there are good evidence-based reasons to teach it explicitly this way," says Warren. "The point is to get as many people as possible on the same page so that when people teach critical thinking explicitly, they're doing it in ways students can perceive to be similar."

"One problem we often face is that students, to the extent they get critical thinking instruction at all, encounter terminological differences that can make it difficult for them to see connections between disciplines and deepen their skills. They are starting from scratch each time."

Warren says she does not expect the use of argument mapping in all GEP to be mandated across campus, it is strictly voluntary. She and her colleagues are simply looking for a critical mass of interested faculty.

For more on Warren's work with argument mapping, visit www.uwsp.edu/cols/Pages/Newsletters/Argument-Mapping.aspx.

Philosophy professor and College of Letters and Science Assistant Dean Dona Warren describes argument mapping to the UWSP Foundation Board of Directors.

New Planetarium Director Reaches Beyond the Classroom

In the 1960s, with the United States locked in a Cold War with the Soviet Union, government funding for science initiatives flowed to all corners of the country. One way in which the funding manifested itself was in the creation of planetaria, which reflected the public's fascination with space exploration. Locally, a planetarium was built on the campus of UW-Stevens Point, where it continues to serve students and the public alike after more than five decades.

"For years, planetaria have been used for classroom instruction and for informal presentations for the general public — It's for everybody," says Sebastian Zamfir, who served last year as interim director of the Allen F.

Blocher Planetarium and Arthur J. Pejsa Observatory and assumes the job on a permanent basis this fall. "This is how it works on our campus as well, and we are trying to reach more and more beyond the walls of the classroom."

Zamfir (right, with Astronomy 205 class) is the planetarium's seventh director, taking over from Randy Olson, who had held the position since 1985. The first director was Blocher, who began his UW-Stevens Point teaching career in 1958 and was instrumental in designing the planetarium, which opened in 1963. Olson, along with immediate predecessors Mark Bernstein and Norman Higginbotham, oversaw the production, adaptation and delivery of more than 11,000 shows serving more

than 370,000 attendees since the late 1970s.

Currently shows are offered to the general public on Sunday afternoons during the academic year, along with weeknight shows twice per week for two months during the summer. Olson was also responsible for building a strong pipeline to regional school districts; Zamfir estimates the facility serves 250 to 300 schools groups every year.

The planetarium serves UW-Stevens Point students enrolled in introductory astronomy classes, providing visual descriptions of celestial spheres, constellations, motions of planets, seasons, and other phenomena understood best with associated visuals. It was also used last year for a new

interdisciplinary course, the History of Astronomy. Students work in the planetarium during their time on campus, and over the years many have gone on to careers with planetaria around the country.

"It's wonderful to work with the student lecturers, to coordinate them for delivering presentations," says Zamfir. "I love the fact that students enjoy what they do. Most of them are attracted to this field and really want to continue beyond graduation."

The way in which planetaria are used has evolved in the years since the Cold War space race, and may influence the way the Blocher Planetarium functions going forward.

"At the [Great Lakes Planetarium

Association] conference last October, I learned that the role of a planetarium has expanded tremendously in the modern age," says Zamfir. "It is a theater not only regarded as a tool for delivering astronomy-related concepts, but also as an environment for visualization. My main idea is we should expand the use of this theater beyond astronomy classes and encourage other professors to use the facility, engage curriculum in the area of the geosciences, anatomy, and others."

Fulfilling this vision will require an equipment upgrade. While the planetarium's Spitz projector is still considered a leading opto-mechanical system, the current system also uses a series of Kodak slide projectors which are no longer manufactured.

As such, finding replacement units or parts, and making necessary repairs, is difficult and expensive. This spring, Spitz representatives were on campus to demonstrate the company's latest digital planetarium technology called SciDome.

A new system would allow the planetarium to deliver new shows to the public, shows designed specifically for digital media. The shows would emphasize the fast-advancing area of astronomy, space exploration and more. It would also allow for the local creation of planetarium shows; Zamfir envisions UW-Stevens Point students working with local middle and high school students on this creative activity.

For more information visit www.uwsp.edu/physastr/plan_obs.



‘Geography is Everything’ for Students

A trip down south for spring break sounds like a vacation, but for 38 students at the University of Wisconsin-Stevens Point, a trip to the Mississippi Delta during their week off from classes was a cultural and learning experience.

Students took the trip as part of Geography 393, “The Environment and Culture of the Mississippi Delta.” Led by instructor Lisa Theo, students learned about the landscape, food, history, music, economy and diversity of several locations in Mississippi and Tennessee.

“Lisa likes to tell us ‘Geography is everything,’” said Cassandra Wentzel,

a junior human geography major from Eau Claire. “So we learned a little bit of everything on the trip.”

At Forks of the Road in Natchez, Miss., the students saw a sculpture of shackles that marks a former slave trading site. In Moorhead, Miss., the group met with the city’s mayor to discuss ways the small community is trying to come back from lost industry and jobs. A stop at the National Civil Rights Museum in Memphis, Tenn., was “eerily quiet and full of introspection,” said Wentzel. Club Ebony, a part of the B.B. King Museum and Delta Interpretive Center in Indianola, Miss.,

opened its doors to serve a soul food dinner accompanied by live blues music.

“Geography is influenced by history, culture, landscape, sociology, economy, poverty, education and race,” said Theo. “I want my students to see what impacts these influences have on a place and why.”

“There was so much to take away from this trip,” said Abby Heistad, a senior communication major from White Lake. “It helped me understand American history and what role the river plays in the delta area. We met people who had a lot of love for their life, even though they

on Mississippi Delta Trip

value different things than we do.”

“I loved getting to know the people,” said Wentzel, who added that much of the area’s history made an emotional impact on them. “We saw where people suffered, where people had to stand up and be brave.”

Theo has been offering this trip consistently since coming to UW-Stevens Point in 2007. The trip is also open to the public as space permits. She feels strongly students benefit from opportunities outside of the classroom.

“You learn so much more by experiencing something for yourself,” she

said. “The trips I took in college, when I could see the history and geography firsthand and talk to local residents, were so impactful that I knew I wanted to take my students on these trips as a teacher.”

Each class Theo teaches includes a field trip aspect. Students in her Urban Geography course have traveled to Chicago, the Twin Cities and Milwaukee to learn the community’s history, structure, environmental impact, industry and urban planning. Their projects, such as creating maps and analyzing data, is done on site then presented to the people it affects in that community.

“We met people who had a lot of love for their life, even though they value different things than we do.”

— Abby Heistad

“Students from all disciplines benefit,” she said. “They learn how to communicate with diverse audiences and gain confidence for the workplace. They find a common ground among their differences. All of the students come back changed.”



Prof Puts De-Extinction Under Microscope

Diehm, philosophy students examine ethics of bringing back species

Native to continental Australia, the thylacine, or Tasmanian tiger, was the largest known carnivorous marsupial of its day. A variety of human-driven events and circumstances led to the species' extinction in the 1930s. Yet in the later stages of the 20th century, researchers announced plans to resurrect the species by reconstructing its genome, synthesizing its DNA and using cloning techniques. Similar projects have been planned and undertaken for such species as passenger pigeons and wild goats.

Sounds good, right? After all, if humans are responsible for a species' extinction, are they not morally obligated to undo the damage if the technology to do so exists? The answer is not so simple, argues University of Wisconsin-Stevens Point philosophy professor Christian Diehm.

Diehm teaches a variety of courses focused on environmental ethics, and several semesters ago took a deeper dive into the ethics of wildlife conservation. In the process of assembling the class, he selected de-extinction as one of the subjects the class would study.

"The topic fits really well, and students gravitated to it," he says. "Students are often drawn initially to the arguments people typically make in favor of de-extinction. The main argument people have made is if humans made a species extinct, they have an obligation to revive it. But when we start talking about it in a lot of detail some people start to question whether it makes sense, they have worries about biotechnology."

While the general technology making de-extinction possible has existed for some time, there has not been much philosophical literature published on the subject. Diehm contributed to the body of work with his recent paper, "Should Extinction Be Forever? Restitution, Restoration and Reviving Extinct Species." In it, he takes a stronger stance than he usually does in his writing – in this case against the notion of de-extinction.

The UW-Stevens Point Museum of Natural History features a display devoted to the Passenger Pigeon (left), which in recent years marked its 100th year of extinction.

"When you look at what the technology of de-extinction actually does, can you really call that restitution?" Diehm says. "I think it doesn't, really. If we do somehow bring back a species, and the life we give them isn't worth it, it's more punishment than making amends."

For example, Diehm cites the likelihood these re-created species would end up on display in zoos. Conversely, there is a great risk in releasing such a species into an ecosystem that has changed dramatically.

"When dealing with species that have been extinct for a period of time, you don't know about their populations, habitats, behaviors," he says. "It becomes speculative as to what the endgame is. You don't know if they'll behave how they did before; in some cases you really don't know how they did anyway! It seems like you're really rolling the dice."

There is also the notion that the possibility of resurrecting species and ecosystems will encourage people to be more lax about conserving them in the first place. "Whether that comes true or



not is hard to say, but it's something to be worried about," Diehm says.

Diehm covered the topic of de-extinction in the initial installment of the 2016-2017 Community Lecture Series. "Should Extinction Be Forever?" held Tuesday, Sept. 13, at the Portage County Public Library. Visit www.uwsp.edu/cols for more details on the Series, sponsored by the UW-Stevens Point College of Letters and Science.

2016-2017

Community Lecture Series

Should Extinction Be Forever?

Chris Diehm, Philosophy
 • September 13, 6:30 p.m.

Emergent Black Ghettos in New York and Chicago, 1880-1940

David Chunyu, Sociology
 • October 11, 6:30 p.m.

The Making of Global Citizens

David Barry, Sociology
 • November 8, 6:30 p.m.

Nuclear Fallout and the Birth of the Ecosphere

Jerry Jessee, History
 • December 13, 6:30 p.m.

Wisconsin's Climate: The Past As Key to the Future

Samantha Kaplan, Geography
 • February 7, 6:30 p.m.

Preparing for the Drone Invasion

Tim Kennedy, GIS Center
 • March 14, 6:30 p.m.

Using Lakes As Sentinels for Environmental Change

Krista Slemmons, Biology
 • April 11, 6:30 p.m.

Rebuilding U.S.-Cuba Relations

Anju Reejhsinghani, History and Jennifer Collins, Political Science
 • May 9, 6:30 p.m.

All lectures held at Portage County Public Library Pinery Room, 1001 Main St., Stevens Point.

A Big Move to Tackle Big Data

Gift helps UW-Stevens Point launch data analytics program

Last year Central Wisconsin employers in retail, manufacturing, health care, agriculture, insurance and software development industries identified a growing data analytics talent gap in the region. McKinsey Global Institute predicts by 2018 the U.S. could face a shortage of up to 190,000 people with deep analytical skills. In addition, a shortfall is projected of 1.5 million managers and analysts with capabilities to use and analyze big data to make effective decisions.

To address these workplace needs, UW-Stevens Point has launched a new undergraduate degree program in data analytics, beginning fall 2016. The curriculum integrates the fields of business, computer science, economics, geography information systems, mathematics and statistics. It will be led by Sentry Insurance Endowed Chairs in Computational Analytics (Department of Computing and New Media Technologies) and Business Analytics (School of Business and Economics).

"Everyone talks about Big Data," says Tim Krause, chair of the Department of Computing and New Media Technologies. "Businesses are becoming more competitive, trying to figure out how to get a leg up. But just because we have more data doesn't mean there are uses for it.

"Is the data clean? Are the tools the right ones for the analysis? Is the answer even in there? How are we communicating back to decision makers in the business?"

In the past, Krause says, the talent set working with data was fragmented, handled by professionals with varied backgrounds, from accounting, business, finance and marketing to math and computing. All had access to data independently of each other and could analyze it and make recommendations within their organizations. But now,

Krause says, "There is a lot more gray area between these disciplines, a greater need to be more interdisciplinary."

The degree encompasses 70 credit hours, which allows students to graduate in four years. A desire to balance business and computing training drove the major's curricular design.

"I think the combination of the two departments is part of what makes what we're doing unique," Krause says. "If you look at other undergraduate data analytics programs around the country, most really emphasize either computer information systems or one or more of the business-oriented disciplines – almost to the exclusion of the other.

"We're looking at local employers who want either business or data analysts, but also recognize that even if they are working in a more traditional role, because of the size and nature of the data that analysts are working with, there is no way of doing the analysis without having a strong toolset: understanding relational databases, integrity, warehousing, mining, and a variety of other skillsets."

A variety of area businesses, from farms to retail to online firms, reported a demand for students trained in data analytics. But it was the major gift from Sentry – the largest in the history of both the insurance giant and UW-Stevens Point – that created the two faculty positions that will drive the program. Krause relates a story of how the March announcement of the gift and program launch spurred immediate interest in the university from a high school student.

"The announcement happened on a Tuesday; we had a student here with his dad to discuss data analytics on Friday, and they were back for orientation in June," says Krause. "Would he have been here anyway? Maybe, maybe not. But news of the endowment, the co-op (IT program launched by

Sentry in downtown Stevens Point), and other activities in our department are cumulatively having a positive effect on enrollment."

As of July, eight students had declared a data analytics major, four new students and four continuing students. All eight are enrolled in DAC 101, Introduction to Data Analytics, along with 16 other students whom Krause believes are testing the data analytics waters.

For more information visit www.uwsp.edu/dataanalytics.



Computing and New Media Technologies chair Tim Krause and former assistant professor of management Lyna Matesi celebrate the announcement of Sentry Insurance's landmark gift, which created endowed chairs in computational analytics and business analytics.



Full Steam Ahead

Construction Work on New Chemistry Biology Building Off to Fast Start

College of Letters and Science Dean Chris Cirmo with members of the Chemistry Biology Building steering committee at a groundbreaking ceremony May 5. (Opposite) Views of the construction site in late September.

If you've been near the University of Wisconsin-Stevens Point in the last three months, you likely have noticed construction activity on the former parking lot X at Fourth Avenue and Fremont Street. Work is progressing splendidly since an April groundbreaking, with construction continuing through the summer and fall. The plan is for occupancy by the fall of 2018. The four story building will have 176,500 square feet with research and teaching labs for biology and chemistry on each floor.

At \$75.18 million, this is one of the largest building projects in Central Wisconsin. Not since Consolidated Papers invested \$110 million in an addition to its Stevens Point Division mill in 1989, has a project larger than this been under way in the Stevens Point area. In addition, this is the first major free-standing academic building to be constructed on the UW-Stevens Point campus in 40 years. And it was the largest state-funded building project from the 2013-15 state capital budget other than road construction.

This investment of state funds in UW-Stevens Point is validation of the exceptional work our faculty and staff perform, as well as our outstanding graduates, who go on to pursue successful careers and meaningful lives. Indeed, hundreds of local and regional jobs will be created in the next few years centered around construction. Based on a formula cited by C3 Statistical Solutions to calculate construction industry impact, the project's economic impact is estimated at \$144 million, generating work for hundreds of people in the construction trades in Central Wisconsin. Our general contractor, Miron Construction, is a Wisconsin-based firm, as are most of the subcontractors. Other service contractors, such as Point of Beginning, County Materials and Nummelin Testing, are located in Stevens Point or within 100 miles of the construction site.

As of September some 70 workers are on site each day. That number will swell to about 150 next spring when mechanical, electrical, drywall and

roofing work are underway, according to Gerald David, Miron project superintendent. All are paid prevailing wages, or more, by their employer. These wages range from \$17 to \$41 per hour, depending on the occupation.

"Because they're making money here, they're spending it here," David said. From hotels and restaurants to hardware and office supply stores, from rental equipment to crane repair, the uptick in local business is noticeable because of the Chemistry Biology Building.

The project is several weeks ahead of schedule. Two stairwells are constructed, a third is underway, and the fourth should be completed by November. It is currently estimated that the building will be weather-secure by mid-February.

Looking ahead, we hope this facility will attract students and faculty to our already exceptional chemistry and biology programs, while serving as a central corridor for students as they move from the residence halls to classrooms



and the Dreyfus University Center. In the meantime, we know this project is providing good jobs to workers and generating business throughout the urban area. That's on top of the \$420 million UW-Stevens Point contributes annually to Wisconsin's economy. The partnership between UW-Stevens Point and our Central Wisconsin communities makes us all stronger and more vibrant. Those interested can watch progress on a live video stream from our website: visit www.uwsp.edu/cols and select New Chemistry Biology Building.



Promotions and Retirements

Promotion from Assistant to Associate Professor

- Brad Mapes-Martins (Political Science)
- Anju Reejhsinghani (History and International Studies)
- David Snyder (Chemistry)
- Lynn Ludwig (English)
- David Roloff (English)
- Vera Klekovkina (World Languages and Literatures)

Promotion from Associate to Full Professor

- Jody Lewis (Psychology)
- Lawrence Morgan (English)

Academic Staff Promotions

- Ann Kiefer (Mathematical Sciences)

Retirements

- Dennis Riley (Political Science)
- David Tamres (Physics)

COLS Development Report

This year marks a special time at UW-Stevens Point as we enter the first year of the public phase in our "Then, Now & Forever, We are Point" capital campaign. Our university alumni, parents and friends continue to transform the learning experience for our students through their generosity as we strive to meet our \$30 million goal by 2019.

During the calendar year 2015, the college awarded almost \$90,000 in scholarships, allowing 163 students life changing financial help in paying for their education. On December 31, 2015, the total assets for the College of Letters and Science at UWSP Foundation were \$3,486,933.82, up from \$3,398,636 the previous year.

Transformation is how we describe the difference philanthropy makes in the lives of our students, departments and our university. This is often the result of passionate and meaningful giving. We encourage our givers to match their passion with their generosity — a formula we hope culminates in deep and meaningful connections with faculty, staff and students to make our world a better place. Some of these transformational gifts include:

- A commitment of \$2 million from Sentry Insurance to create the Sentry Insurance Endowed Chair in Computational Analytics, the first endowed chair in the College of Letters and Science, represents the most transformational gift in the history of both our college and the entire campus. This gift was accompanied by an additional \$2 million gift to create an endowed Chair in Business Analytics in the School of Business and Economics. The result of this generosity is the creation of a new B.S. in Data Analytics, a joint program with the School of Business and Economics and the Department of Computing and New Media Technologies, and classes for the new major will begin in fall 2016.

We have a deep sense of gratitude for this exceptional demonstration of generosity, but the impact of a gift like this goes beyond the walls of our campus. Our industry partners across Central Wisconsin have encouraged us to pursue



educational opportunities in data analytics, and our partnership with Sentry allows us to serve and meet the needs of businesses in our region looking to hire job-ready graduates.

- Thomas Nikolai, class of 1952, made a \$25,000 commitment for the Roland Trytten Scholarship in the Department of Chemistry. The Trytten awards are four-year scholarships given in recognition of outstanding performance by a student majoring in Chemistry, and supports student research.

- A gift of \$25,000 from Alumnus Talin Senner, class of 2000 and owner of Wildcard Corporation in Stevens Point, to establish the Wildcard Corp. Technology Leadership Scholarship in the Department of Computing and New Media Technology. This \$1,000 scholarship is awarded to the top student who demonstrates a personal and professional historic and future interest in Computer Systems Engineering, Programming, Hardware, Networking and other technologies.

- A \$25,000 gift from Barbara Thompson, who sadly passed away this last summer, in honor of her childhood friend, Hazel Koskenlinna, to support the Hazel Koskenlinna Professional Writing Fund. Barbara's continued generosity to this fund has allowed our university to enhance our robust professional writing curriculum and recruitment of future Pointers through education and scholarship.

- A partnership, the first of its kind in the College of Letters and Science, with the Central Wisconsin Information Technology Alliance (CWITA) to support a position in the Department of Computing and New Media Technologies. CWITA, a professional organization consisting of businesses in Central Wisconsin, worked together to produce start-up funding of almost \$95,000 for new faculty support.

Cliff King, CEO at Skyward, led the initiative to increase the university's ability to graduate more students. Members of CWITA, including Sentry, Skyward, Delta Dental of Wisconsin, EO Johnson, Heartland Farms, Eastbay and CoVantage Credit Union, were instrumental in making this partnership a reality.

Eugene Katz Distinguished Justus and Barbara

Faculty Award

- Alton "Sonny" Smart, Sociology and Social Work

UW Teaching Fellows

- Vera Klekovkina, World Languages and Literatures
- Valerie Barske, History and International Studies

Paul Award

- Erica Weisgram, Psychology

University Awards

- Karin Fry, Philosophy, University Scholar Award
- Nate Bowling, Chemistry, University Scholar Award
- Brian Barringer, Chemistry, Excellence in Teaching Award

- Vera Klekovkina, World Languages and Literatures, Excellence in Teaching Award
- Erica Weisgram, Psychology, Excellence in Teaching Award
- Robin Tanke, Chemistry, University Service Award
- Al Bond, Information Technology, Academic Staff Excellence Award

COLS Majors, Minors and Facilities

Biology

Chair – Karin Bodensteiner

ADA – Donna Gear

- • Biology
- Aquaculture/Fish Culture

Chemistry

Chair – Paul Hladky

ADA – Cristina Altobelli

- • Chemistry
- Chemistry, ACS certified

Computing and New Media Technologies

Chair – Tim Krause

ADA – Jenny Wierzba

- • Computer Information Systems
- • Web and Digital Media Development

English

Chair – Michael Williams

ADA – Kim Siclovan

- • English
- Biomedical Writing
- Creative Writing
- Professional Writing

Geography and Geology

Chair – David Ozsvath

ADA – Mary Clare Sorenson

- • Geography
- Geoscience
- Environmental Geography
- Geographic Information Systems and Spatial Analysis
- Geology

History and International Studies

Chair – Lee Willis

ADA – Janis Swinford

- • History
- • International Studies

Mathematical Sciences

Chair – Andy Felt

ADA – Jenny Wierzba

- • Mathematics
- Applied Mathematics

Philosophy

Chair – Shanny Luft

ADA – Connie Anderson

- • Philosophy
- Religious Studies

Physics and Astronomy

Chair – Mick Veum

ADA – Nancy Stokosa

- • Physics

Political Science

Chair – John Blakeman

ADA – Connie Anderson

- • Political Science
- Public Administration and Policy Analysis

Psychology

Chair – Craig Wendorf

ADA – Kay Hackett

- • Psychology

Sociology and Social Work

Chair – Robert Enright

ADA – Karin Hyler

- • Sociology
- Social Work
- Gerontology

World Languages and Literatures

Chair – Tobias Barske

ADA – Karin Hyler

- • French
- • German
- • Spanish
- English as a Second Language

COLS Dean's Office

Dean – Christopher Cirmo

Assistant Dean – Dona Warren

Associate Dean – Todd Good

University Service Associates –

Patricia Kleman, Dawn Haynes

Assistant to the Dean for Planning, Media and Events – Scott Tappa

Tech Support – Aaron Schaufenbuel

Development Director – Tony Romano

Interdisciplinary Programs

- • American Studies
- Biochemistry
- Comparative Literature
- Earth Science
- Environmental Studies
- International Studies
- Native American Studies
- Natural Science Broad-field (Edu.)
- Peace Studies
- Small City Analysis
- Social Science Broad-field
- Women's and Gender Studies

Master of Science in Teaching

- Biology
- English
- English (reading certification)
- History
- Mathematics

Pre-Professional Studies

- Pre-Chiropractic
- Pre-Dental
- Pre-Engineering
- Pre-Law
- Pre-Medical
- Pre-Mortuary
- Pre-Optometry
- Pre-Pharmacy
- Pre-Veterinary
- Pre-Physician's Assistant

Outreach Centers and Facilities

- Allen F. Blocher Planetarium
- Aquaponics Innovation Center
- Arthur J. Pejsa Observatory
- Center for Athletic Scheduling
- Center for the Small City
- Collaborative Degree Program
- Geographic Information System (GIS) Center
- Museum of Natural History
- National Information Center for Polymer Education (POLYED)
- Northern Aquaculture Demonstration Facility (NADF)
- Wisconsin Association for Critical Thinking (WACT)

ADA = Academic Department Associate

■ = Major

• = Minor

Social Media

Connect with the College of Letters and Science on popular social media platforms:



facebook.com/
UWSPCOLS



@UWSPcols



UWSPcols



UWSPCOLS



UW Stevens Point
COLS



Experimental Test of Overwinter Site Selection by Ectotherms Based on Thermal and Spatial Cues by Alex Thomas.



UWSP Ease of Hours by Chase Jaime (above, with professor Robert Dollinger), Joseph Wilson and Jack Cooke.

Student research showcased at undergraduate symposium

Collaborative research between students and faculty members at the University of Wisconsin-Stevens Point was presented at the 17th annual **College of Letters and Science Undergraduate Research Symposium** on May 6, 2016. More than 120 research posters and presentations were featured from students representing 10 departments within the college. The next Undergraduate Research Symposium will be May 5, 2017. Visit www.uwsp.edu/cols/pages/researchsymposium to stay posted.



Globalization and Japan: Gender, Nationalism and New Media by Michael Marichal (above) and Alan Bustamante.



College of Letters and Science

130 Collins Classroom Center
Stevens Point, WI 54481
715-346-4224 phone
715-346-4213 fax
cols@uwsp.edu

www.uwsp.edu/cols

The University of Wisconsin-Stevens Point is an Equal Opportunity/Affirmative Action Institution
UW-Stevens Point is a tobacco-free campus



**University of Wisconsin
Stevens Point**