Schedule of Events
Tuesday, September 22 | Opening Day

11:00 - 12:00  Making it Move: Using Media to Enhance Teaching and Learning, Center for Digital Scholarship
This interactive session examines the viability of animations and infographics to present content matter in meaningful ways. Through a brief theoretically-grounded exploration of how people learn, we explore the ways in which carefully and purposefully constructed instructional media may help students in the classroom. Presented by KC Frye, Multimedia Artist and Motion Graphics Specialist and Crystal DeJaegher, Learning Designer, from the Office of Digital Learning at Notre Dame.

12:00 - 1:45  K-12 Lunch and Learn, Jordan Hall Reading Room
This session features K-12 members and partner organizations from the Michiana community who are transforming education through educational technology in the classroom. Presenters have been invited to share their innovative approaches to teaching and learning in a variety of content domains with the university at-large. This session begins with several brief lightning talks preceded by a gallery showcase where attendees are invited to engage with the presenters. Lunch will be provided. Hosted by Thomas Loughran (Physics), Matt Kloser (IEI, STEM Education), and the Office of Digital Learning.

1:00 - 2:00  Designing and Re-Designing Courses, Hesburgh Library, Rare Books and Special Collections Room 102C
Every class you teach involves a plethora of choices. Come listen and engage in conversation with a panel of your colleagues as each describes how they put together their courses, the factors and weights they give to their particular course design, and the factors which influence tweaking and re-redesign. Joining them will be instructional designers and consultants in the use of some of those methods and tools whose experience with the broader ND faculty community will inform their contributions to the conversation. Participants will include Laura Gekeler (OIT), Jim Frabutt (IEI, ACE), Mark Olsen (Biology), Alison Lanski (Classics), and Jeanne Romero-Severson (Biology).

1:00 - 6:00  Maker Showcase, West Lake Hall
Members of the ND community will have the opportunity to visit West Lake Hall to explore exciting ways in which departments and groups on campus are utilizing emerging technologies to enhance the learning and creative process. 3D printing/scanning, laser cutting, arduino, ceramics, woodworking, and other exhibitors featured.

2:00 - 3:00  Experiencing the Digital Visualization Theatre, Jordan Hall of Science
The Digital Visualization Theater (DVT) offers a live flight through the Large Hadron Collider’s (LHC) detection of the smallest components of the universe. Scientists, teachers, and students at the Notre Dame DVT and QuarkNet Center have developed a dynamic exploration of the LHC’s inner workings using real data from the LHC’s experiments. The DVT is an entirely digital 136 seat, 50 foot domed theater and planetarium designed to fly the audience anywhere in the universe. The QuarkNet Center is an NSF funded outreach program that involves high school teachers and students in research opportunities on the frontiers of particle physics. The QuarkNet Center’s scientists will demonstrate the workings of the LHC and be available for questions after a visually spectacular short presentation of the nature of the LHC’s discoveries.

2:00 - 3:15  Capturing the Moment: Screen Capture to Support Student Learning, DeBartolo Hall 228
You may be wondering why you would want to capture a screenshot or record a video of your screen. The short answer is that it can help you communicate with more clarity and impact than you can with written words alone. In this session, Dr. Craig Lent and Dr. Yih-Fang Huang from the College of Engineering will discuss the power of screen capture as a pedagogical tool. Chris Clark from the Kaneb Center will also provide a hands on workshop on using the screen capture software Snagit.

3:00 - 4:00  There's an App for That: Apps for Teaching and Learning, Mendoza College of Business 339
This session will discuss examples of mobile apps that are being applied to a variety of disciplines and instructional styles. The event will feature faculty demonstrations of successful implementations and a wide-ranging discussion of using apps and related pedagogies to cultivate active learning. Presented by Matt Willmore, mobileND Program Manager with OIT Teaching and Learning Technologies.

4:00 - 5:00

**Keynote: "Robot Ethics" with Don Howard, Professor of Philosophy and Fellow of the Reilly Center DeBartolo Hall 131**

The next great technology-induced transformation in human affairs is already underway. It is driven by the ever-accelerating development and deployment of advanced robotics and artificial intelligence. Autonomous weapons, self-driving cars, health-care robots, automated trading systems, computer-assisted medical diagnosis, “smart” controls for household appliances – all of these and more have begun to reshape our economy, our politics, our military, and the very fabric of our daily lives and our social relations. Combine developments in robotics and artificial intelligence with the internet revolution and the revolutions in synthetic biology and nanotechnology, and a radically different future world appears before us swarms of nanobots conducting full-time, ubiquitous surveillance and re-engineering our bodies from within as we also demolish the human-machine distinction, turning ourselves into custom-built, highly-enhanced androids.

5:00 - 7:00

**Digital Week Opening Reception, DeBartolo Performing Arts Center**

Join us for hors d'oeuvres and conversation at the second annual Digital Week opening reception. Among other highlights will be robotics demonstrations and a series of short lightning talks by faculty. Invite only.

**Wednesday, September 23 | GIS Day**

9:00 - 10:00

**What in the World is GIS?: GIS Basics Workshop, Center for Digital Scholarship**

GIS is a system of hardware and software for the storage, retrieval, mapping and analysis of geographic data. It provides a system for organizing spatial and related information into a single analytical framework and is used in a variety of academic and industry settings for understanding spatial relationships. This workshop will address the question “What is GIS,” provide a variety of examples, and present the resources available in the Center for Digital Scholarship. Presented by GIS specialist Milan Budhathoki. Registration: [http://nd.libcal.com/event/2168824](http://nd.libcal.com/event/2168824)

10:00 - 11:00

**Using GIS Resources in the Classroom, Center for Digital Scholarship**

Want to incorporate GIS into your class but don’t know where to begin? In this event, Matthew Sisk showcases his Intro to GIS online learning modules that are freely available for use by colleagues in Notre Dame. Registration: [http://nd.libcal.com/event/2168825](http://nd.libcal.com/event/2168825)

11:00 - 12:00

**Mapping the Relief Effort in Nepal, Center for Digital Scholarship**

On April 25, Nepal was hit by a powerful earthquake of magnitude 7.8 that killed more than 9,000 people and affected the lives of millions of people. Immediately during the aftermath, many relief organizations within and out of the country were earnestly engaged in a post-earthquake relief effort. Mapping became a vital part to guide aid/relief workers and government agencies to evacuate lives, prioritize immediate reliefs and quantify damages. Mapping also helped to identify areas where there might be a risk of landslide and flooding that was exacerbated by the quake tremor. This talk, presented by Milan Budhathoki, GIS Specialist, will focus on the volunteered and crowdsourced campaign to map post-earthquake relief work in the Himalayan nation. Thousands of volunteers around the world helped to map affected urban and rural settlements, analyze damaged infrastructures and benchmark future development plans.

12:00 - 1:00

**Enhancing Your Classes with Media, Stinson-Remick Hall of Engineering 109/110**

Interested in adding media to your Sakai course site? Curious how to use video to “flip” your class? What does flipping a class mean? What is the Kaltura Media Gallery? See and hear from Dr. Yih-Fang Huang (professor, electrical engineering) Tom Marentette and Jeff Hanrahan (Academic Digital Media Services), and Xiaojing Duan (developer and engineer, Office of Digital Learning) on how video is changing his learning environment. Get started with a live demo on how to enhance your instruction with video using the Media Gallery tool in Sakai.

12:00 - 1:00

**GIS Lightning Talks, Center for Digital Scholarship**

Sit in for the electrifying talks and learn how Notre Dame researchers and South Bend City planners use GIS resources. Undergraduate students, graduate students, postdocs, staff, faculty, and community members will be given 5 minutes each to present their work. Lunch will be provided.
12:00 - 1:15 Historic Urban Environments (HUE), Bond Hall Gallery
The Historic Urban Environments Lab (HUE) at Notre Dame is a new interdisciplinary team of architects, computer scientists, librarians, programmers, anthropologists, and GIS specialists whose goal is to create new tools to study the built environment. Building off of the success of two digital projects created by the Architecture Library, the Seaside Research Portal and SPQR-ND, the team is currently working on several websites and applications to better study the built environment. Efforts include expanding SPQR-ND, an application for the iPad and iPhone that combines early architectural publications with mapping tools, beyond its current focus of the Roman Forum to include the historic city center of Rome and creating a application to study lost architecture through historic records combined with 3D modeling.

1:00 - 2:00 Inverting a Flipped Classroom: Using Technology to Propel Students to the Next Level, Information Technology Center 121
Professor David Hyde will discuss his efforts to transform his Genetics course (which he has taught for 25 years) into a “flipped-class” format, including his extensive use of iPads in the course redesign. Hyde will also demonstrate new presentation styles and pedagogical strategies. Also he will present evidence of how these innovations significantly improved student performance relative to past offerings in the standard lecture format, with special attention to the improvement in weaker students. A large amount of time will be available for discussion of these and other approaches. Sponsored by OIT Teaching & Learning Technologies.

1:00 - 2:00 GIS Posters and Pastries, Center for Digital Scholarship
Graduate students showcase GIS-based research in their field. During this time, there will be a special GIS cake for everyone to enjoy while browsing through posters.

Maps have been an integral part of news reporting at The New York Times for well over a century. Every event that takes place, takes place somewhere, and is in some way influenced by its surrounding landscape. Similarly, the landscape itself, is affected by events that develop within it, whether those events concern politics; climate; demography; economics; agriculture; poverty; terrorism or war. This talk will shine a light on when and how maps and spatial analysis are employed by The New York Times, and how we determine the best possible way to tell the story of an event and through its geography.

3:30 - 4:30 Small Classes to Scale, O'Shaughnessy Hall 107
In order to facilitate on campus use, MOOC (massive open online course) platforms are adding small classroom features and capabilities to accommodate blending learning environments. These features also provide opportunities to create a more intimate learning experience among thousands of MOOC students. This discussion-oriented presentation will consider the possibilities and challenges of incorporating the qualities of a small classroom into a massive class setting. Nina Huntemann is the Director of Academics and Research at edX. Prior to joining edX, Nina was a tenured faculty member at Suffolk University in Boston with 15 years of on campus and online teaching experience.

Thursday, September 24 | Digital Humanities Day

9:30 - 11:00 Lightning Talks, Center for Digital Scholarship
The Center of Digital Scholarship and the Office of Digital Learning present graduate students and postdoctoral fellow lightning talks as part of ND's Day of Digital Humanities 2015. The lightning talk session is intended a showcase for research as well as an opportunity for colleagues to discover common research and teaching interests. This fast-paced event is a great opportunity to learn about digital humanities research being conducted on campus.

11:00 - 11:45 Conversation with Professor Martin Mueller, Center for Digital Scholarship
Join the Day of Digital Humanities keynote speaker, Professor Martin Mueller of Northwestern University, for an informal discussion of student engagement in digital humanities projects.

12:00 - 1:30 Synergy Social: Digital Humanities Research "Speed Dating", Center for Digital Scholarship
Open to all. After light refreshments and an informal chance to mingle, the “speed dating” will begin. Attendees with particular skillsets/areas of expertise will be stationed around the room, while those with specific project ideas or general interest in exploring some of the available areas of expertise represented will walk around in search more information or a potential collaborator.
Making the Most of a MOOC: Using and Reusing Courseware, Geddes Coffee Room
Professors Gary Anderson and Gabriel Reynolds will discuss their experience as lead faculty partnering with the Office of Digital Learning to create Theology MOOCs offered to the world online for free. Recent Ph.D Anthony Pagliarini will discuss how he incorporated content from the Foundations of Theology MOOC into a for-credit, online course for Notre Dame students this summer; these same courseware assets are now being made available to all theology faculty. We will discuss not only how to repurpose digital courseware, but when and why to do so. One illustration will be the Theology Media Gallery in Sakai, which enables colleagues to incorporate the courseware into their own classes according to their own vision.

Innovating Assessment in Large Classes, Fitzpatrick Hall 258
Interested in innovative assessment processes that reduce the grading burden, promote students' engagement, and improve learning outcomes? This session is for you. Math Professor Arthur Lim will share how he used Maple TA to create a more interactive assessment environment, keep students accountable for their own learning, and streamline grading. In addition, engineering professor Victoria Goodrich will describe how the First-Year Engineering Program has uses electronic portfolios (ePortfolios) as an assessment tool for student engagement in the Introduction to Engineering course sequence.

Digital Humanities Workshops:
Introduction to Text Encoding with Daniel Johnson, Center for Digital Scholarship, Classroom 129
The popular Text Encoding Initiative (TEI) Guidelines describe an XML format for creating archival-quality digital editions of text and other cultural artifacts. Utilizing practical examples, this workshop will explore the history of the Guidelines, their underlying technology, and the reasons scholars might use the format. Registration: http://nd.libcal.com/event/2176817

Finding Images: Teaching & Researching with Artstor with Denise Massa, Center for Digital Scholarship, Conference Room 131A
ARTstor is an educational resource that shares over a million digital images rich in the arts, architecture, humanities and sciences. This workshop combines online demonstrations and hands-on practice to show participants how to search for images, build a lecture, present images on or offline and organize image groups for personal or shared uses. ARTstor’s Digital Library covers a wide range of pedagogical disciplines including: African-American Studies, American Studies, Anthropology, Architecture & the Built Environment, Asian Studies, Classical Studies, Decorative Arts, Design, Fashion & Costume, Languages & Literature, Latin American Studies, Maps & Geography, Medieval Studies, Medicine & Natural Science, Middle Eastern Studies, Music History, Native American Studies, Photography, Religious Studies, Renaissance Studies, Theater and Dance, and Women’s Studies. Registration: http://nd.libcal.com/event/2176804

Want to conduct a virtual research seminar? Or connect with students who are off campus? In this demonstration, we will provide the information you need to know about the facilities available on campus for web conferencing and the best software options for your use cases.
Presented by Paul Drake of OIT Teaching and Learning Technologies

Prepare to explore ancient masterpieces, the Roman Forum and the Taj Mahal, in 3D visualizations. Chris Sweet, Assistant Director of Cyberinfrastructure Development at the Center for Research Computing, has teamed up with Notre Dame School of Architecture Associate Professor Krupali Uplekar Krusche, in the Digital Historical Architectural Research and Materials Analysis (D.H.A.R.M.A) project. This project documents World Heritage Sites around the world and has been using 3D imaging and programming to build a database where people can visit and analyze these historical landmarks digitally. Presentation will include 3D visualization. 3D glasses will be provided to audience.

Day of Digital Humanities Keynote: "Back to the Future: Philology in a Digital Age" with Professor Martin Mueller, Northwestern University, Center for Digital Scholarship
Martin Mueller, Professor Emeritus of English at Northwestern, is a leading voice in the digital humanities; his talk is concerned with the fate of the humanities in the digital age. Mueller’s primary research field has been the uses of ancient epic and tragedy by European writers since the Renaissance. He has also written on Homer and Shakespeare. More recently he has become interested in the uses of information technology for traditional philological inquiries. Together with Ahuvia Kahane, he is the editor of The Chicago Homer, a multilingual web site that uses the search and display capabilities of digital media to make distinctive features of Early Greek epic accessible to readers with and without Greek. He is the general editor of WordHoard, an application for the close reading and scholarly analysis of deeply tagged texts. Find out more about his current work at his blog Scalable Reading.
9:30 - 10:30  **Flipping Out: Lessons Learned, Jordan Hall of Science 325**
Faculty and students who have designed or experienced a "flipped" course join learning design experts from the Kaneb Center and the Office of Digital Learning for a discussion of best practices and important considerations for faculty contemplating moving their lecture content into online video for review outside of class. Presenters include **Laurie Kirkner** (ODL), **Kevin Barry** (Kaneb Center), **Maureen Dawson** (FYS), **Craig Lent** (Engineering), and **Paul Manrique** (Student Affairs).

10:00 - 11:00  **From the Ridiculous to the Sublime: Technology Tools for Teaching, Jordan Hall of Science**
Academic technologists from the Office of Information Technologies will feature a variety of tools that enable faculty and students to be untethered in the classroom. Join us for a hands-on session with tablets, wireless projection, annotation software, and student response systems. See how Notre Dame faculty incorporate these tools into the learning process, and try them yourself. Presented by Brian Burchett, Bob Guthrie, Kevin Abbott, and Jeff Bain-Conkin of OIT Teaching & Learning Technologies.

11:00 - 12:30  **I Heart Learning Analytics, DeBartolo Hall 303**
Last June, Notre Dame joined the edX consortium to improve access to education on a global scale by offering Massive Open Online Courses (MOOC). To date, we have launched a total of four MOOCs. In addition to bringing world class education to a global audience, MOOCs offer a valuable opportunity for scientific research into learning. In this talk, **Alex Ambrose** (Kaneb Center), **Crystal DeJaegher**, **Xiaojing Duan** (both Office of Digital Learning), and **John Dillon** (English) will present their research findings yielded Notre Dame’s “I Heart Stats” MOOC.

11:00 - 12:00  **Light Up Your Teaching, Jordan Hall of Science 208**
Have you heard about the lightboard from colleagues, but are not sure where it is, how to access it, and how to use it in your teaching? Join colleagues from OIT and the College of Science for this hands on open house to introduce you to this exciting instructional-video capture studio.

12:30 - 1:30  **Pedagogy Day Keynote: "Evidence-Based Approaches to Curriculum Reform and Assessment" with Lappan-Phillips Professor Melanie Cooper, Michigan State University, Jordan Hall of Science 322**
There is now fairly large body of work from the learning sciences providing us with insights into how people learn; and from Discipline Based Education Research (DBER) we know what discipline-specific difficulties students face. However, it is quite surprising that relatively little of this understanding has made its way into the design of science and engineering curricula offered at most colleges and universities. While there is much discussion of evidence based reform, most of these efforts are focused on incorporating pedagogical techniques, rather than redesigning the curriculum and the concomitant assessments of student learning in light of evidence from research. Professor Cooper’s presentation will focus on the need for evidence based curriculum reform, the research findings that can guide such reforms, and how we might assess the results of these reforms. Examples of curriculum reform efforts and assessment strategies will be presented.

1:30 - 2:30  **Pedagogy and Pastries, Jordan Hall of Science, 4th Floor Landing**
Gather with colleagues and Professor Melanie Cooper to discuss the latest innovations, challenges, and discoveries in science teaching.