GIS Council
MINUTES
2/20/13 11:30 am
NWQ B 6593

1. Attendance: Karra Barnes, Marcy Bidney, Patti Day, Donna Genzmer, Rina Ghose, Ivy Hu, Bill Huxhold, Brian Nicholls, Robert Schneider, Alexandra Snowden, Lisa Sutton, Howard Veregin, Ken Woodall, Changshan Wu

2. Move to approve GIS Council Minutes for May 7, 2012, by Patti D., seconded by Brian N. Approved.

3. GIS Certificate Committee

   Bill H. introduced Robert Schneider as a new committee member from the Urban Planning Department. Bob S. shared his background and research interests.

   Enrollment update [Day] trying to update the list. 22 responses; 42 enrolled.

   Fall 2012 (Spring 2013) graduates [Hux, Day]

   Donna G. requested notice of any grad student presentations for posting on the GIS Council website http://www4.uwm.edu/gis/events

   Bill H. reviewed the Fall GIS Student Orientation. The orientation was good. We should do it again in fall.

   Bill H. introduced Ivy H.'s new transportation course which has a GIS component. Discussion followed about adding it as an elective to certificate. UP 841. Committee needs to vote on this. Ken W. inquired about a possible overlap with Continuing Ed transit course. Pre-reqs will be a Basic GIS course (not 215). Motion by Rina G. to approve UP 841 as a GIS elective with the pre-requisite of a basic GIS course. Seconded by Ivy H. Passed. Effective ASAP. Patti will take this to L&S. (see attached Syllabus)

4. Student Topics/Concerns/ GIS Club & ASPRS Student Chapter

   Karra B. reported on activities the GIS Club is considering for the upcoming semester: Oak Creek project, putting finishing touches on the Milwaukee River Greenways service learning project, map a bike route from Milwaukee to Madison for a fundraiser, geocaching, plus creating an event in April with 3 invited GIS professionals.

   Donna G. reminded all that the deadlines for Esri student opportunities are March 15th for the internship and March 29th for the EsriUC Assistantship.

   The GIS Club is planning a trip to the EsriUC. Participants are Karra Barnes and 3 others. They need free registrations. A survey of those present indicated no other campus participants. Donna G. will work with the club to utilize free registration.

5. GIS Council (2012-2013)

   Lisa S. reported on the Hyperspectral and LiDAR data acquisition. The coverage is Milwaukee County, probably 2010. Nancy Frank and Ivy H. are working on a project utilizing this data. Howard V. mentioned WisconsinView LiDAR imagery availability: 5' DEM bare earth, hydro flattened.

   Howard V. opened a discussion of the proposed GeoDesign Graduate Certificate at UW-Madison and UW-Milwaukee's possible participation in a multi-campus model. (see attached brochure) Discussion followed:

   > What is geodesign? Is it a fully developed concept yet? Multidisciplinary. Certificate possibly hosted in Madison landscape architecture department. It would be a professional certificate. A large amount of the content would be online. A multi-campus model could be used to fulfill competencies in specific areas. The Certificate is in planning stage, hopefully going live in 2014. Examples: Penn State. Philadelphia has new MA in Geodesign…. Penn State, USC? Doug Miskowiak, UW-SP, is interested. There is a new Esri textbook on Geodesign. Bill H. noted that UWM Architecture Department approached the Urban Planning Department for how to fit GIS into their program. Is there anybody in Madison Landscape Architecture qualified to take this on?: Janet Silbernagel. Bob S.'s pedestrian and bike course might fit.

   Donna G. and Howard V. discussed a possible visit by David Tulloch to campus on 4/26/12. Madison Geospatial Summit is in the afternoon on 4/25. David's keynote presentation will be focused on VGI/PGIS. David was active in WI Land Information. Donna G. reported anticipated costs to be ~$100 for shuttle, housing, food. Those

present gave a positive response. Donna G. will move forward on this. Donna G. and Howard V. noted that it would be mutually advantageous to coordinate a visit by Summit speakers to both campuses in future years.

Lisa S. gave a brief GIS Day 2012 recap, including sharing the evaluations.

Donna G. gave a brief update on the Campus GIS Server. The server will be updated to v10.1 as soon as operating sites have been successfully transferred.

Donna G. anticipates a call for EdTech Proposals. Possible proposals from the GIS Council are: 1) Campus GIS Server renewal and 2) GPS equipment. Brian N. says Anthropology looks at their GPS units as a campus wide resource.

Donna G. will meet with Christina Makal McCaffery regarding fundraising. Efforts have been delayed by the recent departure of our contact.

6. GIS Council 2013-2014

Donna G. review past practice for choosing ArcGIS versions for teaching across campus. This should be decided at the next meeting.

There was a general discussion about GIS Day 2013 (November 20, 2013) A chair for the event is needed. Ken W. is willing to co-chair the event, but cannot do it alone. Bill H. will approach Shoreh Elhami (GIS Corps) and Max Baber (USGIF) about being our keynote speaker.

Ivy H. volunteered to chair the GIS Student competition.

7. Other news/updates? (research, datasets, new hires, etc.)

Donna G. was recently named as University Consortium for Geographic Information Science's (UCGIS) Communications Committee Chair. A brief discussion followed on what that entails.

Lisa S. gave an update on WIGICC activities: working on permanency, nonprofit status and a data integration plan, the Esri/K12 agreement is stalled. The sense is that WI DOA is concerned that the agreement would eventually cost them money.

8. Next meeting: Donna G. will send out a doodle poll for MTWR 3/25/13

9. Adjourned 1:06 pm.

Respectfully submitted,

Donna G. Genzmer

SCHOOL OF ARCHITECTURE AND URBAN PLANNING
UNIVERSITY OF WISCONSIN - MILWAUKEE

URBPLAN-841 Transportation Planning and GIS
Wednesday 5:30-8:10PM, AUP 191

Instructor: Lingqian (Ivy) Hu
Email: hu1@uwm.edu
Office: AUP 338
Office Hours: Wednesday 4:00PM-5:20PM and by appointment

Course Objectives:

This course provides a comprehensive introduction to transportation planning and GIS analysis methods, with emphasis on U.S. urban transportation. This course focuses on the theories, models and analysis methods associated with current planning practice. As such, it emphasized GIS applications. Students will learn the fundamentals of demand, supply and impact analysis.

Texts and Reading:

Meyer, M. and E. Miller (2001) Urban Transportation Planning, 2nd edition. New York: McGraw-Hill Higher Education Publishers

All other required readings will be available on the course website

Course requirements:

The class is organized as partly lecture and partly labs. Students are expected to attend ALL class sessions. Students should read weekly assignments and be prepared for class. Technical material will be presented in lecture form. Empirical examples, exercises, and case study readings will be presented and discussed by students. In addition to class participation, course requirements include assignments, midterm exam and final paper, which are all graded. Late assignments will be marked down.

Grading:

The course grade will be calculated as follows:

Assignment 1	5 %
Assignment 2	10%
Assignment 3	10%
Midterm exam	25%
Final paper	30%
Class participation and discussion	20%

Academic Conduct:

The University, as an instrument of learning, is predicated on the existence of an environment of integrity. Faculty have the primary responsibility for establishing and maintaining an atmosphere and attitude of academic integrity such that the enterprise may flourish in an open and honest way. Students share this responsibility for maintaining standards of academic performance and classroom behavior conducive to the learning process. Please review Chapter UWS 14 and Faculty Document No. 1686 at: http://www4.uwm.edu/acad_aff/policy/ academicmisconduct.cfm for both UWM's and my expectations of appropriate student academic conduct.

For other university policies, please go to the website: http://www.uwm.edu/Dept/SecU/ SyllabusLinks.pdf

Course Schedule

Here is the course schedule of topics and reading assignments. This schedule is subject to change, depending on the needs and preparation of class members. It more time is required for difficult material, the schedule will be revised accordingly.

Week 1	9/4/13	Introduction
Readings		Meyer and Miller, chapters 1, 2 Transportation Statistics Annual Report 2010 pp. 1-15, annual highlight
Week 2	9/11/13	Regional Transportation Planning and Data Management
Readings		Meyer and Miller, chapters 4 Urban transportation planning in the United States: history, policy, and practice (index, which lists the historical evolution)
Week 3	9/18/13	GIS for Transportation
Readings		Nyerges, chapter 7 in Hanson and Giuliano (2004)
Debate		
Week 4	9/25/13	Transportation Network and TAZ
Readings		Transportation Planning Computer Systems Traffic Analysis Zones Assessing Level of Service (LOS)
Lab		
Week 5	10/2/13	Demand Analysis I

Readings		Meyer and Miller, chapters 5
Debate		
Assignment 1 due	10/2/13	Transportation Planning Process
Week 6	**10/9/13**	**Demand Analysis II**
Readings		How Land-Use-Transportation Models Work Waddell (2002) Modeling Urban Development for Land Use, Transportation and Environmental Planning.
Lab		Land Use and Transportation Tool
Week 7	**10/16/13**	**Supply Analysis I**
Readings		Pucher, 2004, chapter 8 in Hanson and Giuliano Kain, 1999, chapter 11 in Gomez-Ibanez and Winston Giuliano and Hayden, 2005 Transit planning
Assignment 2 due	10/16/13	Demand Analysis
Debate		Your experience of transit in Milwaukee
Week 8	**10/23/13**	**Small Area Analysis**
		Introzonal analysis Papacostas and Prevedouros (1993) chapter 9 Site Planning and analysis
Lab		
Week 9	**10/30/13**	**Mid-term**
Week 10	**11/6/13**	**Project Selection**
Readings		
Week 11	**11/13/13**	**Project Evaluation**
Readings		

Week 12	**11/20/13**	**Network Analysis I**
		    Location analysis
		    Closest facility

Assignment 3 due	11/20/13	

Lab		
Week 13	**11/27/13**	**Network Analysis II** Drive time analysis Spatial interaction
Lab		
Week 14	**12/4/13**	**Network Analysis** III network modeling and analysis defining cost surfaces finding best routes
Lab		
Week 15	**12/11/13**	**Course Summary**
Week 16	**12/18/13**	**Final Project Due**

Admissions

Requirements *

Students seeking admission to the program must meet the following requirements:

- Baccalaureate degree (BA or BS) from accredited US institution or equivalent, in a design or planning field (landscape architecture, planning, architecture, engineering, or related field), or in geography or a related field.
- Evidence of strong academic performance comparable to a "B" grade point average or above.
- Demonstrated experience with GIS technology, whether through university coursework, professionally, or software training.

Returning post-master and post-doctoral students seeking professional development skills may also apply to the program.

Tuition

Tuition for the 2012-13 academic year is $743 per credit hour for residents and $1,575.48 for non-residents. The approximate cost of the entire program for resident students is $11,200 and $23,600 for non-residents.

Intended Outcomes

The intent of the Geodesign program is to develop more effective utilization of GIS and related geospatial technology in the design fields. The overall goal is to allow participants to build on their design and GIS experience to develop new skillsets integrating geospatial software into the design process. Upon completion of the certificate program students will be able to effectively apply geospatial technology and adapt geographic analysis methods to solve design problems more effectively and in ways that support efforts around sustainability, sound environmental stewardship and management, and effective planning and design.

About Us

Key Faculty and Staff

Janet Silbernagel, UW-Madison, Landscape Architecture and Nelson Institute

Patrick Eagan, UW-Madison, Engineering and Nelson Institute

Asli Göçmen, UW-Madison, Urban and Regional Planning

Marty Gustafson, UW-Madison, Engineering

Douglas Hadley, UW-Madison, Landscape Architecture

John Harrington, UW-Madison, Landscape Architecture
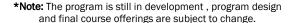
Doug Miskowiak, UW-Stevens Point, Geography & Geology

Howard Veregin, UW-Madison, Geography/State Cartographer's Office

More Information

For more information, please contact:

- Doug Hadley, dbhadley@wisc.edu, 608-s263-6506
- Howard Veregin, veregin@wisc.edu, 608-262-6852

*Note: The program is still in development , program design and final course offerings are subject to change.

Proposed: Geodesign Capstone Certificate Program

Program Information

Geodesign is an exciting new field that integrates geographic analysis and geospatial technology into the design process.

Geodesign is not a new concept or approach to design or planning. Instead it emphasizes collaboration among the design professions (landscape architects, architects, planners, engineers, and others), the natural and social sciences (including geography), and other stakeholders. Geodesign is enabled by Geographic Information Systems (GIS), Technology (GIST), and Science (GIScience) to effectively and efficiently inventory, represent, analyze, design, evaluate, and communicate planning and design alternatives. The effect of Geodesign is to create a better, sustainable future for life on earth.

Geodesign uses GIS tools, functions and dashboards throughout the design process to engage and empower stakeholders, represent current conditions, analyze how complex systems function and relate, model and evaluate future design alternatives, and monitor change.

The Department of Landscape Architecture at the University of Wisconsin-Madison – in cooperation with other departments and programs at UW-Madison and UW-Stevens Point – is developing a one-year Geodesign Capstone Certificate Program to fill the growing demand for these integrated geospatial design skills in today's job market. The post-baccalaureate program will provide a practical, experiential project-based curriculum across a range of possible application areas. The program is intended to provide the skillsets needed across a spectrum of Geodesign uses, whether in the public or private sector.

About the Program *

The program is designed for working professionals with basic GIS experience looking to gain expertise in Geodesign approaches and technology, as well as recent graduates who wish to acquire technical expertise to support the topical knowledge gained in their undergraduate major. The intended audience includes design professionals seeking to enhance their GIS and spatial analysis skills, as well as GIS professionals seeking to broaden their proficiency in planning and design applications.

This is not a broad-based program focusing on the full range of GIS technology or applications. Nor is it a complete design degree program. Rather it emphasizes the approaches and tools needed to directly leverage geospatial information and methods within design workflows. It focuses on the use of advanced geospatial technology and analysis in the design process, where it can be vetted against a wide array of place-based phenomena. The program thus extends and complements traditional GIS programs and curricula, as well as design and planning education.

Draft Curriculum *

The program is comprised of two semesters of coursework as well as a final capstone design project. Refresher courses may be taken as needed in the summer prior to the first full semester and over winter break. Through hands-on exposure through lab exercises, course projects, and the final project, students will gain experience with the latest Geodesign technology applicable to the design process.

Students must complete a minimum of 15 credits in the program. A core course introducing students to Geodesign concepts and methods will be offered in fall semester. Other course topics include conservation design, urban and regional planning, cartography and Web mapping, GIS for environmental modeling, and GIS for sustainability. A 3-credit capstone project is tailored to individual backgrounds and interests, including work-related projects by students who are professionally employed. Students may enroll full- or part-time in fall or spring semester.

The program is a multi-campus collaborative effort, with courses offered at several campuses of the UW system. Students will be able to take advantage of online learning opportunities where available. It is anticipated that much of the curriculum will be available online.

Semester	Courses	Credits
Summer	**Pre-requisite:** GIS Refresher	—
Fall	**Required:** Introduction to Geodesign **One Elective:** Regional Environmental Planning GIS for Conservation Design GIS Applications for Working Lands GIS Applications in Planning	6
Winter Break	GIS Refreshers	—
Spring	**Two Electives:** Advanced Design in Cartography Web-Based Mapping GIS and Spatial Analysis GIS for Environmental Modeling; GIS for Sustainability Urban Ecology Planning; GIS for Sustainability	6
Summer Capstone	**Required:** Capstone project and presentation	3

*Note that the program is still in development and final course offerings are subject to change.

GIS Day 2012 Survey responses

Total responses: 62

Attendees:
UWM - 17   Undergrad - 3
                  Grad student - 8
                  Faculty - 2
                  Staff - 4
Private sector - 11
Public sector - 19
Other – 9 (retired; Madison students)

UWM Departments represented:
Geography - 6
Geosciences - 2
Urban Planning - 2
Anthropology - 2
Business - 1
Geology - 1
History - 1
Gerontology - 1
Institute for Service Learning - 1
Cartography & GIS Center - 1
Library – 1

Heard about GIS Day through:
Other – 18 (mostly co-workers or named individuals)
UWM GIS Listserv - 14
Instructor - 11
Other listserv - 6
UWM GIS Council website - 3
Facebook - 2
LinkedIn - 1
Twitter - 0

Taken courses that introduced you to GIS?
Yes – 33
No – 20

Currently use GIS at school or work?
Yes – 47
No – 8

First GIS Day at UWM?
Yes – 30
No - 24

Rotating Sessions:

Statistic	RS1: Census Bureau TIGER Products	RS2: Remodeling Map Milwaukee for the Contemporary Web User	RS3: ATC Aerial Patrols - Using Mobile GIS Applications from a Helicopter	RS4: GIS and Wine (Terroir in Nova Scotia)	RS5: Integrating County Parcel Data Using Web Services	RS6: Why Care About GIS?	RS7: Historical Streams Analysis	RS8: Milwaukee Data Initiative	RS9: Sales Data Pushed to District Managers via iPad
Min Value	2	3	3	3	3	3	3	3	3
Max Value	5	4	5	5	5	5	5	5	5
Mean	3.64	3.54	4.07	3.84	3.85	4.20	4.19	3.63	3.50
Var	0.55	0.27	0.99	0.58	0.81	0.74	0.83	0.84	0.50
Std Dev	0.74	0.52	1.00	0.76	0.90	0.86	0.91	0.92	0.71
Total	14	13	14	19	13	15	16	8	10

Workshops:

Workshops:Statistic	W1: Intermediate Python Scripting for ArcGIS 10	W2: Isn't That Spatial?	W3: Intro to Map Mashups	W4: Advanced Python	W5: Intro to GIS: Community Participatory Mapping Tool	W6: Accessing Census Data using American FactFinder	AGSL Rare Room Tour	Keynote speaker	Ignite sessions
Min Value	3	3	3	2	3	3	3	3	3
Max Value	5	5	5	5	5	5	5	5	5
Mean	3.88	4.33	3.79	3.80	4.11	4.20	4.00	4.29	4.00
Var	0.65	0.75	0.49	1.07	0.61	0.62	1.00	0.51	0.62
Std Dev	0.81	0.87	0.70	1.03	0.78	0.79	1.00	0.72	0.78
Total	16	9	14	10	9	10	5	21	14

If you attended the Ignite Sessions, what did you think of this format?

Text Response
It was alright, but I don't think 5 minutes was long enough. I don't think I got enough out of the lectures
I love the format and will use it in some of the teaching I do going forward.
I really like Ignite talks. Too bad the screen couldn't be up higher so we could see the whole screen, the bottom was cut off by tables & people.
Liked these as they were presented.
It was fun!
I like the format. Lots of information in a short amount of time. Though maybe add more time.
Absolutely excellent! The whole day was magnificent - good amount of content, networking time, hands on, keynote.   The only thing that could be improved about the day was that the lighting should be improved. Very difficult to see slides of the keynote and the ignite folks in that one section of the ballroom.   Thanks to everyone!
They were a ton of fun. The 5 minutes really brought out the fun side of the presenters.
Really like these. Format forces speakers to stay on track.
I liked it, it was fun and fast-paced.
I thought it was great.
Good, fast, informative
Thumbs up.
Great format. The best part of the day.
A bit rushed but the time frame kept the presenter focused on the topic.   Loved Bill Cozzens presentation--- very entertaining man.
It was interesting, and nice that the presentations were kept short. Not sure about the choice of all of the presenters though...
Good, well done.
I thought that it went well. Wish there were a few more.
Short and sweet, but it seemed to make at least one person very nervous.
really enjoyed it.

Please share any comments or suggestions you have for future GIS Day activities.

Text Response
I enjoyed both the speakers at the lunch break. Will there be any GIS online courses offered by UWM?
I really enjoyed it!
Keeps getting better every year. AGS Tour was amazing.
Unfortunately I couldn't spend the day to be able to give a complete evaluation but here goes: The workshop I attended was interesting, but given the nature of what was covered, there wasn't enough time to get into more examples. I think this was largely due to specific pre-requisits for course, and so time was spent on more basic items. I think this might be an important consideration for future sessions, either lengthen the time or describe the level of knowledge on should before walking into the session.   While one shouldn't complain about a free lunch, here are a couple of suggestions that might help. I am not vegetarian, but the only choice for those who are was cheese pizza. You would be more out of luck if you were vegan. Also, while I love pizza, this was cold by the time I got it to my table. I understant that pizza is a nice cheap option often, but I wonder if there is a possibility of having something cold, say sandwiches....   One final, and minor thing, I am not familiar with the UWM campus. It would have been nice to have suggested places to park in the announcement. I wound up in the Union parking lot, which I don't know if there would have been better/cheaper places to park. Otherwise, it was a neat conference and being my first, I have not regrets about attending.
Outstanding event, as usual!! Each year gets better and better... great job and hats off to all involved!
It was an introduction to GIS for me, and it was all very exciting!
I never heard about you before this. I spend most of my time on campus in Lapham 2nd floor or Bolton basement. Any chance of future events flyers posted in either of these places ??
I enjoy the GIS Day so far, a lot people have involved and talked about interesting topics. However, I do think we need invite more participants from other universities such as UW-Madison and Marquette university. The GIS is a core ideaology that has taken off in recent years and it will be a huge enrichment to our event to see how the students in other universities are using GIS in their academic careers. Thank you and have a good day!
Keep on doing them!
It was great.
the class started 15 minutes late, ended 30 minutes early and didn't really cover as much as it could have. it was disappointing and I probably won't do that again
Can you bring in any ESRI training? When attending any class formate for GIS I always learn something new also made good contacts within the industry.   This maybe picky but in our group we parked on the farthest west side of the campus(I know parking is limited) 8:45am, for registrating we had to go to the library to sign in then our first session was the mashup 9:00am so the we had to go back to the far west side of the campus in the architecture building, Then back to the library for lunch I know you can't have the entire GIS day in one room but I was a follower in our group and probably next time I would not have signed in at all. I am sure by now you are chuckling-"welcome to the life of a student"-i'll stop wining.
I was one of the presenters so I didn't attend any of the presentations except the keynote which was

very good.

Please have more coffee available!!!!! I enjoyed the Python Workshop and the lunchtime speakers. Itw as a great day and good to see so many more people there this year compared to last year.

I'm not sure the solution to this problem. But the attendance at the rotating sessions is rather weak. I suspect this is because they are at the same time as the hands-on workshops. I'm guessing attendees, particularly students, would rather do the workshops.

Great job this year! Well attended, great sponsors, and quality programs!

I got alot out of the speakers as to what GIS was and how it can be and is used. Advanced python I would have liked to see how to create a python script from model builder but overall it was informational

Good feedback in attendee participation with workshops and revolving presentations. Always a great variety of input and presenters. Good job!!!!

Had a great time!

For the one session we were able to attend, Map Mashups, it was apparent to me that the instructor presumed we all had a basic understanding of GIS and the programming language. It would have been helpful if they would have explained the coding systems, why certain things were input, and have a handout that explains how to do the various functions so that we can go back to the office and play with the various things we learned.

Enjoyed meeting a bunch of new people.

I think you do a great job of organizing this event. I have just one small quibble...(very, very tiny)...before announcing "the pizzas are here!" - make sure the folks delivering them have had time to get them out on the tables...this will avoid hoards of hungry attendees hovering over them while they put the pizzas out on the tables!

Maps and directions to events outside of Library - several people had a hard time locating SARUP , especially. Distribute up in AGSL but also have copies for Welcome Desk since many stopped there.