

GIS Council

MINUTES

04/02/2018 11:30 a.m.

AGSL

1. Attendees: Stephen Appel, Glen Fredlund, Donna Genzmer, Rina Ghose, Robert Schneider, Ivy Hu, Mark Schwartz, Paul Vepraskas (phone), Changshan Wu
2. Approval of the Agenda, approved
3. Approval of Minutes: April 24, 2017. Glen F. moved, Bob S. seconded; approved.
4. Student Topics/Concerns/ GIS Club & ASPRS Student Chapter: Update [no students present]
Donna G. announced the GIS Club's recent acquisition of a drone. Rina G. inquired about use of the drone in courses; it is up to the club. The complexities of ownership was discussed. Paul V. has a drone license and will coordinate with the club. Mark S. is working with a student for other drone usage. Paul V. indicated the cost of a license is ~\$150 and is valid for 3 years.
5. GIS Certificate Advisory Committee [Wu, Genzmer]
 - 5.1. Approval of Minutes: December 11, 2017 (quorum) Bob S. moved, Ivy H. seconded; approved
 - 5.2. Approve program change to reflect Geography course renumbering. (See attachment)
Motion by Bob S., second by Changshan W. to approve the proposal with a change in the wording of the last sentence in the second paragraph to:
"Students select the remaining 6 credits for the certificate from electives, which may include an internship or independent study (not to exceed 3 credits), in areas such as remote sensing, map-making, and data management systems."; approved.
 - 5.3. Elect GIS Certificate Committee Chair and appoint GIS Certificate Coordinator for 2018-19
Nominated, moved and approved: Glen F. chair, Donna G. coordinator
 - 5.4. Need student representative:
Recommendations were made by the committee and Donna G. will follow up with the students.
 - 5.5. Student suggestions for improvement – discussion. (See attachment)
Improvement suggestions include: Better communication about course scheduling, Move course table to more prominent location on website and include frequency of offering, Need updated syllabi (Donna G. send email), and Software.
6. GIS Council (2017-2018)
Donna G. provided an update on Council finances. Donna G. will hire help for GIS Day. Boundless will potentially provide a scholarship related to OpenSource GIS. Rina G. will explore Open Source and report back.
UCGIS Dues: Donna G. paid the 2018 dues.
Stephen A. provided an update on AGSL activities: AGSL is moving more towards critical information literacy model. AGSL is updating geospatial metadata –major project; will look for specific student hire. A new scanner was purchased. ArcPro is installed on some AGSL computers.
Geocoding with the High Performance Computing Cluster update by Stephen A. One needs to take intro HPC courses to get into this –info on website.
EdTech Proposals: Donna G. submitted a proposal for the Campus GIS web server. Changes: virtual server housed in the UWM Data Center.
Esri UC: UWM has 4 complimentary admissions. Current requests from R. Headley, M. Marseille.
GIS Day 2017 Recap provided by Donna G. and Greg L.: survey: attendance >200
PoD (Power of Data) Teacher Academy: <http://www.pod-stem.org/>, outreach training will be conducted by Donna G. and Kate Madison. Two workshops, 35 hours of professional development in each.
7. GIS Council 2018-2019

Discussions included: ArcGIS version for next year– ArcGIS 10.6 released earlier this year; we are currently teaching with 10.4.1. R. Ghose is using ArcGIS Pro. Donna G. will submit a request to UITTS Software for classroom and campus computer lab software installations. Can load both; Rina will get version for Pro; Paul V. needs desktop version for UP794.

GIS Day 2018 (November 14, 2018): Donna G. was appointed chair. Ideas for keynote were discussed.

GIS Student competition: Bob S. volunteered to chair, Rina G. volunteered to judge. Advertise GIS Competition NOW.

8. Meeting adjourned at

Respectfully submitted,
Donna G Genzmer, GISP

Certificate Requirements --OLD

Credits and Courses

The School of Architecture and Urban Planning, and the College of Letters and Science jointly offer the certificate. A minimum of 6 semester-long courses and 18 credits to receive the certificate. A minimum of 6 credits each in Urban Planning and Geography courses is required.

The core courses (12 credits) focus on the structure of geographic data, components for managing geographic information systems, spatial analysis, and delivery of geographic information through maps and displays. Students select the remaining 6 credits for the certificate from electives, which may include an internship, in areas such as remote sensing, map-making, and data management systems.

Time Limits

Certificate program time limits shall be established as follows:

- 18 or fewer credits/Three years from initial enrollment in the certificate sequence.
- 19 or more credits/Four years from initial enrollment in the certificate sequence.
- For certificates that are designed as add-ons to degree programs and are awarded concurrent with the degree, the time limit shall be the same as that of the degree program.

Requirements

Total Credits	18 credits
Required Course, Tier 1 (select one course)	<ul style="list-style-type: none"> • Geog 525 - Geographical Information Science, 4 credits or • UrbPlan 791 - Introduction to Urban Geographic Information Systems for Planning, 3 credits
Required Course, Tier 2 (select one course)	<ul style="list-style-type: none"> • Geog 625 - Intermediate Geographic Information Science, 4 credits or • UrbPlan 792 - Using Urban Geographic Information Systems (GIS) for Planning, 3 credits
Required Courses, Tier 3 (select two courses)	<ul style="list-style-type: none"> • Anthro 562 - Techniques and Problems in Archaeology, 3 credits • Bus Adm 749 - Data Management Systems, 3 credits • Geog 403 - Remote Sensing: Environmental and Land Use Analysis, 3 credits • Geog 405 - Cartography, 3 credits • Geog 647 - ArcGIS Programming with Python, 3 credits • Geog 725 - Advanced Geographic Information Science: Geographic Modeling, 3 credits • Geog 734 - GIS and Society, 3 credits • Geog 960 - Seminar: Geographic Techniques: (Subtitled), 3 credits • UrbPlan 793 - Applied Projects in Urban Geographic Information Systems, 3 credits • UrbPlan 794 - Internet Geographic Information Systems, 3 credits
Electives (6 credits)	<ul style="list-style-type: none"> • Anthro 380 - Anthropological Applications of GIS, 3 credits • Anthro 562 - Techniques and Problems in Archaeology (if not selected above), 3 credits

	<ul style="list-style-type: none"> • Anthro 768 - Topics in Advanced Research Design in Anthropology • BusAdm 749 - Data and Information Management, 3 credits • Geog 403 - Remote Sensing: Environmental and Land Use Analysis (if not selected above), 3 credits • Geog 405 - Cartography (if not selected above), 3 credits • Geog 515 - Watershed Analysis and Modeling, 3 credits • Geog 525 - Geographic Information Science (if not selected above), 4 credits • Geog 547 - Spatial Analysis, 3 credits • Geog 625 - Intermediate Geographic Information Science (if not selected above), 4 credits • Geog 647 - ArcGIS Programming with Python (if not selected above), 3 credits • Geog 698 - GIS/Cartography Internship, 1-6 credits • Geog 703 - Advanced Remote Sensing, 3 credits • Geog 725 - Advanced Geographic Information Science: Geographic Modeling (if not selected above), 3 credits • Geog 734 - GIS and Society (if not selected above), 3 credits • Geog 750 - Remote Sensing and Urban Analysis, 3 credits • Geog 960 - Seminar; Geographic Techniques (if not selected above), 3 credits • Geog 999 - Independent Work (with appropriate topic), 1-6 credits • InfoSt 465 - Legal Aspects of Information Products and Services, 3 credits • InfoSt 691 - Economics of Information, 1-3 credits • InfoSt 714 - Metadata (prerequisites strictly enforced), 3 credits • UrbPlan 692 - Special Topics in Urban Planning: "Transportation Planning and GIS" subtitle, 1-3 credits • UrbPlan 791 - Introduction to Urban Geographic Information Systems for Planning (if not selected above), 3 credits • UrbPlan 792 - Using Urban Geographic Information Systems (GIS) for Planning (if not selected above), 3 credits • UrbPlan 793 - Applied Projects in Urban Geographic Information Systems (if not selected above), 3 credits • UrbPlan 794 - Internet Geographic Information Systems (if not selected above), 3 credits • UrbPlan 991 - Legislative/Administrative Agency Internship, 3-6 credits • UrbPlan 999 - Independent Study, 1-3 credits
<p style="text-align: center;">Transfer Credits</p>	<p>No more than 20% of the required credits may be taken at an institution other than UWM. To be eligible for transfer, the course must have been completed within the last 2 years. These courses are subject to Graduate School transfer policy and must be approved by the director of the certificate program.</p>
<p style="text-align: center;">GPA Requirements</p>	<p>A minimum cumulative 3.00 grade point average in certificate courses taken at UWM is required.</p>

Certificate Requirements --NEW

Credits and Courses

The School of Architecture and Urban Planning, and the College of Letters and Science jointly offer the certificate. A minimum of 6 semester-long courses and 18 credits to receive the certificate. A minimum of 6 credits each in Urban Planning and Geography courses is required.

The core courses (12 credits) focus on the structure of geographic data, components for managing geographic information systems, spatial analysis, and delivery of geographic information through maps and displays. Students select the remaining 6 credits for the certificate from electives, which may include an internship, in areas such as remote sensing, map-making, and data management systems.

Time Limits

Certificate program time limits shall be established as follows:

- 18 or fewer credits/Three years from initial enrollment in the certificate sequence.
- 19 or more credits/Four years from initial enrollment in the certificate sequence.
- For certificates that are designed as add-ons to degree programs and are awarded concurrent with the degree, the time limit shall be the same as that of the degree program.

Requirements

Total Credits	18 credits
Required Course, Tier 1 (select one course)	<ul style="list-style-type: none"> • Geog 726 - Geographical Information Science, 4 credits (counts as a repeat of Graduate level Geog 525) or • UrbPlan 791 - Introduction to Urban Geographic Information Systems for Planning, 3 credits
Required Course, Tier 2 (select one course)	<ul style="list-style-type: none"> • Geog 826 - Intermediate Geographic Information Science, 4 credits (counts as a repeat of Graduate level Geog 625) or • UrbPlan 792 - Using Urban Geographic Information Systems (GIS) for Planning, 3 credits
Required Courses, Tier 3 (select two courses)	<ul style="list-style-type: none"> • Anthro 562 - Techniques and Problems in Archaeology, 3 credits • Bus Adm 749 - Data Management Systems, 3 credits • Geog 704 - Remote Sensing: Environmental and Land Use Analysis, 3 credits (counts as a repeat of Graduate level Geog 403) • Geog 705 - Cartography, 3 credits (counts as a repeat of Graduate level Geog 405) • Geog 748 - ArcGIS Programming with Python, 3 credits (counts as a repeat of Graduate level Geog 647) • Geog 834 - GIS and Society, 3 credits (counts as a repeat of Graduate level Geog 734) • Geog 926 - Advanced Geographic Information Science: Geographic Modeling, 3 credits (counts as a repeat of Graduate level Geog 725) • Geog 960 - Seminar: Geographic Techniques: (Subtitled), 3 credits • UrbPlan 793 - Applied Projects in Urban Geographic Information Systems, 3 credits

	<ul style="list-style-type: none"> • UrbPlan 794 - Internet Geographic Information Systems, 3 credits
<p>Electives (6 credits)</p>	<ul style="list-style-type: none"> • Anthro 380 - Anthropological Applications of GIS, 3 credits • Anthro 562 - Techniques and Problems in Archaeology (if not selected above), 3 credits • Anthro 768 - Topics in Advanced Research Design in Anthropology • BusAdm 749 - Data and Information Management, 3 credits • Geog 704 - Remote Sensing: Environmental and Land Use Analysis, 3 credits (counts as a repeat of Graduate level Geog 403) • Geog 705 - Cartography, 3 credits (counts as a repeat of Graduate level Geog 405) • Geog 716 - Watershed Analysis and Modeling, 3 credits (counts as a repeat of Graduate level Geog 515) • Geog 726 - Geographic Information Science (if not selected above), 4 credits (counts as a repeat of Graduate level Geog 525) • Geog 747 - Spatial Analysis, 3 credits (counts as a repeat of Graduate level Geog 547) • Geog 748 - ArcGIS Programming with Python (if not selected above), 3 credits (counts as a repeat of Graduate level Geog 647) • Geog 798 - GIS/Cartography Internship, 1-6 credits • Geog 804 - Advanced Remote Sensing, 3 credits (counts as a repeat of Graduate level Geog 703) • Geog 826 - Intermediate Geographic Information Science (if not selected above), 4 credits (counts as a repeat of Graduate level Geog 625) • Geog 834 - GIS and Society (if not selected above), 3 credits (counts as a repeat of Graduate level Geog 734) • Geog 904 - Remote Sensing and Urban Analysis, 3 credits (counts as a repeat of Graduate level Geog 750) • Geog 926 - Advanced Geographic Information Science: Geographic Modeling (if not selected above), 3 credits (counts as a repeat of Graduate level Geog 725) • Geog 960 - Seminar; Geographic Techniques (if not selected above), 3 credits • Geog 999 - Independent Work (with appropriate topic), 1-6 credits • InfoSt 465 - Legal Aspects of Information Products and Services, 3 credits • InfoSt 691 - Economics of Information, 1-3 credits • InfoSt 714 - Metadata (prerequisites strictly enforced), 3 credits • UrbPlan 692 - Special Topics in Urban Planning: "Transportation Planning and GIS" subtitle, 1-3 credits • UrbPlan 791 - Introduction to Urban Geographic Information Systems for Planning (if not selected above), 3 credits • UrbPlan 792 - Using Urban Geographic Information Systems (GIS) for Planning (if not selected above), 3 credits • UrbPlan 793 - Applied Projects in Urban Geographic Information Systems (if not selected above), 3 credits • UrbPlan 794 - Internet Geographic Information Systems (if not selected above), 3 credits • UrbPlan 991 - Legislative/Administrative Agency Internship, 3-6 credits • UrbPlan 999 - Independent Study, 1-3 credits

Transfer Credits	No more than 20% of the required credits may be taken at an institution other than UWM. To be eligible for transfer, the course must have been completed within the last 2 years. These courses are subject to Graduate School transfer policy and must be approved by the director of the certificate program.
GPA Requirements	A minimum cumulative 3.00 grade point average in certificate courses taken at UWM is required.

Suggestions for UWM GIS Program from Team 1

1. More flexibility with enrollment. Streamline or eliminate the initial certificate enrollment process.
2. Annual meetings with advisors to help with class planning. Additional transparency with future class availability.
3. Increased emphasis on Business classes offered or more GIS business classes.

2/7/2018

Meeting Notes

Agenda

- Generate your top 3 recommendations to improve the GIS program at UWM

Recommendations for Improvement

- 1) The GIS council should provide a detailed outline for both Urban Planning and Geography program tracts. This will provide entering students an overview of the class requirements, as well as, GIS techniques that students will be expected to learn and master.
- 2) Provide all enabled computers and laboratories with the most current version of ArcGIS software. Many labs across campus are not equipped with congruent software packages. This may cause software compatibility issues when working between computer laboratories and/or on personal computers.
- 3) Incorporate GIS applications and techniques into undergraduate coursework. This will increase awareness of the possibilities of GIS in research, academic, and professional settings. Exposure to GIS applications and techniques at the undergraduate level may improve recruitment to the GIS graduate certificate program.