Fall 9-1-2016

GPHY 468.01: Community and Regional Analysis SERV

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Department of Geography, University of Montana Fall 2016
GPHY 468 Community and Regional Analysis, 3 cr (CRN 72161)
Stone Hall 217, MF 8.30-9.50
with co-requisite GPHY 469 Planning and Analysis Lab, 1 cr (CRN 72162)
Stone Hall 218, W 8-9.50

Instructor and Teaching Assistant

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Teaching Assistant: Morgan Voss
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Course Objective:

Become a socio-demographic analyst and develop expertise about a chosen community. This is a service learning course. You will both obtain input and share your findings with local leaders and stakeholders.

Learning Outcomes:

This UG course, designed for upper-division and graduate students, prepares students to conduct socio-demographic analysis.
Students will

1. use current data for U.S. communities and regions and describe and evaluate population and employment structure of communities or counties,
2. compare different communities or counties in systematic ways,
3. become familiar and learn to access a variety of public socio-demographic and economic data sources (including AFF and ftp ACS summary data)
4. learn to work with public micro (=survey) data (tentative)
5. develop database management skills (EXCEL, SPSS),
6. use basic statistical procedures (SPSS)
7. visualize summary data (EXCEL, SPSS)
8. identify spatial patterns by producing simple maps (TransCad)
9. gain experience in presenting their work to an audience (prepare a brochure, a poster, and give presentations; InDesign)

Course Pre-requisite:

A quantitative methods course (i.e. Math 117/M115 or higher) or consent of instructor. This is to assure that participants have an adequate mathematical background (mostly linear algebra and some descriptive and inferential statistics) or are inclined to acquire it.

I am adding some mapping components to the course. For that, GPHY 284 or GEOG 381 is helpful, but not required. I am asking students with a solid quantitative and cartography/GIS backgrounds to cooperate with others to promote success for all in this course.

Readings:

There is no text for purchase.
Readings in pdf will be on Moodle. Additionally, URL links to sources will be provided.

We will use both the Moodle course online learning system and a server (likely Ptolemy) for course materials. You need your netID to access Moodle and to log onto lab computers for access to the server. When communicating with you via Moodle, Cyerbear or Outlook, I will use your official University of Montana email.

Course guidelines and policies:

Student Conduct Code

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to
Be familiar with the Student Conduct Code (http://www.umt.edu/vpsa/documents/Student%20Conduct%20Code%20PDF-%20FINAL%208-27-13.pdf).

Disability modifications

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (https://www.umt.edu/dss/default.php).
Students with disabilities are encouraged to register with Disability Services (Lommasson Center 154, 406-243-2243) early on. If you are a student with disabilities, you may request – in advance, not retroactively -- reasonable modifications by contacting me, and I will work with you and Disability Services to provide an appropriate modification. "Reasonable" means the University permits no fundamental alterations of academic standards or retroactive modifications.

Attendance

Attendance is essential to succeeding in this class. It and participation counts for approximately 15% of your grade.

Once you come to class, I expect you to be there for the entire period. If you carry a cell phone, please turn it on mute during the class period. During the lab period, you may opt to step out for an important call.

Official dates and deadlines, including course withdrawal

For official Fall 2016 Dates and Deadlines (http://www.umt.edu/registrar/PDF/OfficialDatesandDeadlinesfall2016.pdf) please consult the Registrar's page

- September 19: Last day to drop via CyberBear without a fee
- October 12: spring 2017 priority registration begins
- December 12: last day of fall instruction
- December 14-20: finals week
- (for exam dates, please see course calendar for this class).

Also see the UM Autum Academic Calendar online (http://www.umt.edu/provost/academiccalendar/.)

Grading Policy

Your work will be graded on a traditional grading system using +- breaks as follows:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
93.3-100	90-93.3	86.7-90	83.3-86.7	80-83.3	76.7-80	73.3-76.7	70-73.3	66.7-70	63.3-67.7	60-63.3	<60

Progress and Grading

Progress in the course is achieved by

- completing a series of lab assignments. These lab assignments are the building blocks of a brochure (early in the semester) and a poster (later in the term).
- producing a short digital brochure and giving a presentation in class
- producing a short printed brochure and giving a presentation in class
- producing a poster and presenting in class
- attending and participating in class and lab
- To support the service learning experience, students will communicate with stakeholders in selected communities, discuss socio-demographic services that can be provided, learn of additional analysis needs, take the community needs into account when producing poster and brochure
- Students will reflect on the service experience through discussion and by writing a report .

grading categories	% of points
attendance	15
labs assignments	25
short digital brochure and presentation	10
service brochure (digit&print) and presentation	30
poster (dig&print) and presentation poster, brochure drafts	5
reflect on service learning (discussion)	7.5
reflect on service learning (report)	7.5
total	**100**

Students volunteering for the bike-ped count (typically in mid-September on a Tuesday 4-6 pm and a Saturday 12-2 pm) will receive a bonus point per day of volunteering.

For the increment for graduate students, please see below.

I will distribute lab assignments through Moodle and/or the server. These assignments will provide you with instructions and point you toward data sources, but they are not entirely 'self-contained'. I will also use demonstrations in-class and lab. Quite likely, you will have questions in the lab as you proceed with the assignments. Be prepared to spend time beyond lab periods to complete labs, especially at the stage of producing the poster or brochure. Also set some time aside to communicate with community stakeholders. This is an essential element of service learning.

Feel free to work in a team of two undergraduate or two graduate students.

Lab assignments are due via Moodle on Tuesday 8pm following the Wednesday lab (or as spelled out in assignments). Given the complexity of assignments and the grading scheme**, I cannot accept late lab assignment**. However, **you can miss one assignment** without a negative effect on your grade.

Other items due (reports, outline drafts) are due as specified. Late reports and outline drafts will be discounted.

We will NOT use e-mail to forward information on individual scores or grades. We will try to employ Moodle to post scores. If there should be technical difficulties with that, we will look for other ways of making scores available – but not via email.

Digital submission directions

You will submit assignments digitally via a dropbox on Moodle.
For assignments, you are free to work in a team of two students.
For these group assignments, be sure to include both group members' names on the assignment.
The file should be named name1_name2Assign#.docx (name1/2 etc. stands for your last name/s, # stands for the number of the assignment).
Each member must separately submit the document, to make sure everyone receives credit – and to not miss out if a team member overlooks to submit the team's work. (Please note: submitting the same or very similar assignments without showing names of collaborators is in violation of the Student Conduct Code.)

The submission process is described below. It is similar to attaching a file to an e-mail.
1. Click on the submission link (may be called Assignment # Dropbox).
2. Then click on "Browse."
3. Locate your file on your computer. Double-click your file. The file name will then appear in the field to the left of "Browse."
4. After the file name appears, click "Upload this file." Once your file is uploaded, its name will appear in blue lettering below the "Submission draft" heading.
5. After uploading, click "Send for grading."

6. A dialogue box will inform you that you won't be able to attach additional files or delete what you're submitting. Click “Yes” to continue and finish the submission process. On the grader’s end of Moodle, assignments will appear as Word attachments next to your names. Time of submission will also be displayed.
7. The due date and time is the cut-off for submitting.

Graduate Increment

Graduate students will write a review and present on a thesis, book or several research articles related to their own research as well as the content of the class (5-8 pages, 1.5 line spacing). In-class presentations about this will be just before Thanksgiving. Graduate students will also write an abstract (target: 250 words, please submit no later than 12/2) that could be submitted to a professional meeting (in late 2016 or 2017; Tip: keep an eye on the AAG call for papers and abstract deadline www.aag.org, for 2017 in Boston). While undergrads should consider participation the UM Conference on Undergrad Research UMCUR, graduate students should plan on the UM Graduate Student Research Conference GSRC, usually held in early to mid April. In several instances, assignments for graduate students will have additional, more challenging components. Overall, the work of graduate students will be judged against higher standards than the work of undergraduate students.

Service Learning Criteria

The University of Montana-Missoula has established the following criteria for Service Learning courses. In order to receive the Service Learning course designation, a course must clearly exemplify all of the following criteria:

- Students in the course will provide a needed service to individuals, organizations, schools, or other not-for-profit or tax-exempt entities in the community.
- The service experience is directly related to the subject matter of the course.
- Knowledge from the discipline informs the service experiences with which the students are to be involved.
- Activities in the classroom will provide opportunities for students to actively reflect upon what they have learned through the service experience and how these experiences relate to the subject matter of the course. Reflection should be imbedded as course assignments and in-class time should be scheduled to do reflection – both should be clear on the syllabus. Reflection should incorporate discussion/assignments that help students understand the importance of meeting community needs through service and civic engagement in a democratic society.
- The course offers a method to assess the learning derived from the service. Credit will be given for the learning and its relation to the course, not for the service alone.
- Service interactions in the community will recognize the needs of service recipients and represent reciprocal partnerships between the campus (class) and community partner organization(s). Community partner(s) should have the opportunity to provide advice and feedback in class on the nature and value of the service performed by the students.
- Training (by the service agency) and preparation (by the course instructor) ensure that students perform service activities in a professional manner and that vulnerable populations are not harmed.
- Service options ensure that no student is required to participate in a service placement that creates a religious, political, or moral conflict for the student**.**

In a 3-credit service learning course, students should be required to perform a minimum of 15 hours of community service per semester (i.e. 5 hours of service per academic credit.) Service hours may include hours spent in training, preparation, and direct contact with clients.

Additional Resources and Services

The Writing Center: During the semester, the Writing Center www.umt.edu/writingcenter offers tutoring services in writing. Located in LA 144 (406-243-2266), the Writing Centers is open on weekdays.

Career Services (406-243-2022), located in Lommasson Center 154. Career Services http://www.umt.edu/career/ can help with employment-related inquiries. Please note fall and spring job fairs, workshops on resume writing, job interviewing, etc.

Internships

A professional internship can be a useful addition to your formal education. Internship experience also adds to your resume. Furthermore, an internship can allow you to connect with a potential long-term employer. For the UM's **Internship Services**, please consult the website http://www.umt.edu/internships or http://www.umt.edu/internships/student/FindanInternship.php. Internship opportunities, brought to the attention of current or ex-students or our faculty members, are also publicized via the Geography listserv. Previously, students also had good luck in locating and even opening up internship opportunities by directly contacting agencies and employers they would like to work for. Professional conduct is critical in assuring success with arranging for and successfully completing internships.

Geography Listserv

The **Geography listserv** allows you to gain and share information about up-coming departmental events (from group advising to parties); internship, preceptorship, and job opportunities; and other relevant information (graduation deadlines, course announcements, meeting announcements, etc.) The instructions below are from our website

http://www.cas.umt.edu/geography/facilities_resources/list_serv.cfm. To join:

1) Send an e-mail to: GEOGRAPHY-subscribe-request@LISTS.UMT.EDU
   This must be sent from the e-mail account that you wish to be on the Listserv
2) Leave the subject line blank
3) In the body of the e-mail type this:
   subscribe your name Geography

You will receive an e-mail message confirming your subscription.
Please use the listserv judiciously. Keep in mind that the REPLY key will go to ALL listserv members, not only the person who sent a previous message.

The **Curry Health Center** http://www.umt.edu/curry-health-center/ on Eddy Street (406-243-2122), provides medical services for students, including counseling

Mountain Line and ASUM Transport: Did you know that Missoula's bus service, the Mountain Line http://www.mountainline.com/ is free? ASUM buses are also free, including the U-DASH evening bus to downtown http://www.umt.edu/asum/asum_agencies/Transportation/bus/default.php.

Get Involved

- Consider serving on the ASUM Transportation Board and other student and civic organizations
- Become active in the Geography Club. Become a member of the GTU (Geographical Honors Society)
- Volunteer in the community

Topics

I. Introduction to Community and Regional Analysis

- Socio-demographic analysis and planning/GIS
- Socio-demographic analysis and service learning
- Understanding the structure and dynamics of communities through data analysis
- Basic EXCEL (YOUTUBE TUTORIALS)
- Scholarly Basics: how to reference sources; rules of thumb for showing data as tables, charts, and maps.

II. Population and Population Structure *(software: Excel, TransCad)*

- Census Basics: data, hierarchies, Census summary versus ACS summary versus ACS micro data
- Who lives there (descriptive measures, demographic profile using Census 2010 STF1 and ACS survey data)
- Basic mapping (TransCad Tutorial)
- Where are certain population groups(Location Quotient)

III. On Service Learning; Tools for Sharing Findings (InDesign)

- Socio-demographic analysis as a service to communities
- A tool for producing posters and brochures (InDesign Tutorials)

IV. Economic Structure *(Excel)*

- How do people make a living (SIC, NAICS)
- Why do job data differ (CBP, REIS, CEW/ES-202)
- Dominant versus over-represented sectors (~ economic base approach)
- How has employment changed (economic restructuring, shift share technique)
- Tentative: Employment versus income measures

V. Population Dynamics: Trends and Components (*Excel, SPSS)*

- What are the trends in population growth (linear trends)
- What drives population growth (components of change: births, death, migration)

VI. Population Dynamics: Cohort-Component Basics *(Excel, TransCad)*

- There is more to population change than trends and components (the need for including cohorts/age)
- Importance of cohorts in population analysis: the case of rural population decline
- Cohort-specific net migration data (University of Wisconsin)

VII. Summary Versus Micro Data (SPSS)

- Census Bureau: ACS Public Use Micro Sample PUMS; What PUMS Users Need to Know
- The Data Dictionary
- SPSS Basics for Survey Analysis

VIII. Service Partner Feedback; Reflection on Socio-Demographic Analysis and Service Learning

Course Schedule

day	sess	date	Topic	~syll
M	1	29-Aug	Introduction to the course; sociodemographic analysis, planning, and GIS	I
W	2	31-Aug	Lab Orientation, EXCEL Basics	
F	3	2-Sep	Using public data for understanding the structure and dynamics of communities; basic referencing; case study vs. comparative approach; charts and maps	
M		5-Sep	Labor Day - no classes	II
W	4	7-Sep	Decennial Census versus ACS (summary, not micro data)	
F	5	9-Sep	Decennial Census versus ACS (summary data); Mapping basic population data	
M	6	12-Sep	Measure of spatial concentration	
W	7	14-Sep	Census/ACS data: LQ, maps and charts, referencing	
F	8	16-Sep	Socio-demographic analysis as service to communities; InDesign Basics, brochure basics	III
M	9	19-Sep	Establishing contacts with service learning clients	
W	10	21-Sep	How do people make a living (employment data)	IV

F	11	23-Sep	Working with employment and/or income data	
M	12	26-Sep	How have employment and incomes changed; Brochure basics	
W	13	28-Sep	Employment&Income Lab (toward short digital brochure)	
F	14	30-Sep	Report on Service Learning Feedback	VII
M	15	3-Oct	Population dynamics, trends and estimates	
W	16	5-Oct	present short digital brochure on employment and income	
F	17	7-Oct	Population Estimates Lab	V
M	18	10-Oct	Components of change	
W	19	12-Oct	Components Lab	
F	20	14-Oct	Cohort component model-basics	
M	21	17-Oct	Cohort component model: age and survival	
W	22	19-Oct	Lab8b: Component Trends	
F	23	21-Oct	Cohort component model: age group lab	VI
M	24	24-Oct	Q&A	
W	25	26-Oct	Migration Flows Lab/Optional Cohort Survival-Netmigration Lab	
F	26	28-Oct	The Wisconsin model	
M	27	31-Oct	Wisconsin Model Lab/County-County-Migration Flows Lecture	
W	28	2-Nov	rough brochure draft due	
F	29	4-Nov	Q&A, service learning feedback	
M	30	7-Nov	Design Feedback (Neal Wiegert)	
W	31	9-Nov	Work on printed brochure: population, employment; draft of brochure due	VII
F		11-Nov	Veterans' Day - no classes	
M	32	14-Nov	Present on brochure (digital and printed service brochure due)	
W	33	16-Nov	SPSS Basics	
F	34	18-Nov	Data Dictionary -- reading PUMS data	VI
M	35	21-Nov	Descriptives -uni-, bi-variate, associations	
W		23-Nov	Student Travel Day - no classes	
F		25-Nov	Thanksgiving break - no classes	
M	36	28-Nov	Service Learning feedback on brochure, report due	VII
W	37	30-Nov	Working with the PUMS Public Use Micro Sample	
F	38	2-Dec	more on public use micro sample	
M	39	5-Dec	draft of poster on PUMS due	VI
W	40	7-Dec	work on final presentation & poster	
F	41	9-Dec	Q&A	
M	42	12-Dec	last day of regular classes: early poster presentation?	
Tu		13-Dec		
Fr		16-Dec	Final: Poster presentation, poster due	