Geography and Geoinformation Science 310-001 Introduction to Digital Cartography

Fall 2018 Credits: 3

Tuesdays 10:30 am - 1:10 pm, Exploratory Hall 2310

INSTRUCTOR INFORMATION

Dr. Sven Fuhrmann Associate Professor Exploratory Hall 2204 Phone: 703-993-2289

Email: sfuhrman@gmu.edu

Office hours: TU 1:30PM-2:30PM, WE 1:30PM-2:30PM and by appointment.

Teaching Assistant

Jin-Kyu Lee

Email: jlee67@gmu.edu Office Hours & Location: TBA

CLASSMATE CONTACT INFORMATION

| Name | E-mail | Phone |
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CATALOG DESCRIPTION

Study and creation of maps. Fundamental mapping principles (projection, scale, generalization, symbolization) and applied computer-based cartographic production.

COURSE ORGANIZATION

This course is a lecture-discussion-lab mixed class. Class time will be split between discussion of readings on cartography, lectures about cartographic concepts, and lab time applying these concepts into praxis. In the lab, students will learn using Adobe Illustrator® and MAPublisher® to make maps.

LAB ACCESS

All enrolled students have computer lab access to Adobe Illustrator and MAPublisher in lab EXPL 2102.

MATERIALS

Required Text

None

Recommended References

Recommended reading material will be made available on Blackboard or handed out during lecture.

Other Materials

Students will require a 32GB USB Drive (or larger) for storage of their lab project materials.

George Mason Online account

It is essential that you activate your George Mason computer account, since we will be using Blackboard for communication and assignment purposes.

General Class Policies

This class will consist primarily of:

- Weekly reading and homework assignments
- Self-initiated study and knowledge development
- Written assignments
- Project assignments
- Exams
- A final project

Knowledge and Effort

This course requires significant computer file management skills and the ability to work within a Windows computer environment without assistance. You are **expected to spend considerable time developing thoughtful products**, conducting limited research to feed into your written assignments, as well as participate with others in the class and lab. Students must demonstrate a mature, professional, and conscientious effort toward class work and participation.

Attendance

Students are expected to attend class. This course introduces considerable material and requires many hours of work. Please do not fall behind your reading or assignments. Poor attendance will result in a poor final grade. Additionally, students are expected to arrive on time. Because of the size of this class, students entering the classroom late disturb the class activities. **Be present and be punctual.**

Late Work (Lab Assignments)

Late work will only be graded if it is **submitted within 10 working days of the due date**. Please note that late assignments will be subject to a 10% reduction in the overall assignment grade.

If Blackboard is not working the day that assignments or labs are due, the due date is extended until Blackboard becomes available. To be certain, please contact your instructor or teaching assistant for further guidance.

Cell Phones

All cell phones need to be turned off during class and during examination periods.

Video and/or Audio Recording

Video and/or audio recording and distribution of lecture content is not permitted and require consent of the lecturer.

UNIVERSITY POLICIES

University ADA Statement and Policy

Students with special needs (as documented by the Office of Disability Services) that will require compensatory arrangements must contact the instructor no later than the fourth class period to discuss specific arrangements and logistics. Students who have not already done so will be required to contact the Office of Student Disability Services located at SUB I, Room 4205 (703.993.2474). George Mason University is dedicated to providing these students with necessary academic adjustments and auxiliary aids to facilitate their participation and performance in the classroom. The full ADA-compliant policy is available online at: http://ods.gmu.edu/

Academic Testing for Students with Disabilities

Students who are approved for testing accommodations have the option of using the Office of Disability Services exam lab to take in-class tests or quizzes with their accommodations. Any student who schedules a test with ODS must schedule tests during the in-class scheduled test time (or seek an exception from the instructor) and are expected to take the test at ODS. If a student schedules to take a test with ODS but decides that they will take the test in the classroom, the student will be responsible for notifying ODS and the instructor prior to the class start time.

Academic Integrity

Learning and teaching take place best in an atmosphere of intellectual fair-minded openness. All members of the academic community are responsible for supporting freedom and openness through rigorous personal standards of honesty and fairness. Plagiarism and other forms of academic dishonesty undermine the very purpose of the university and diminish the value of an education. Specific sanctions for academic dishonesty are outlined in George Mason Student Handbook. More information: http://oai.gmu.edu

MasonLive/Email (GMU Email)

Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program (including messages related to this class) will be sent to students solely through their Mason email account. See http://masonlive.gmu.edu for more information.

University Policies

Students must follow the university policies. See: http://universitypolicy.gmu.edu.

Responsible Use of Computing

Students must follow the university policy for Responsible Use of Computing. See: http://universitypolicy.gmu.edu/policies/responsible-use-of-computing.

Diversity

"George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth.

An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected." http://ctfe.gmu.edu/professional-development/mason-diversity-statement/

GRADING AND EXAMS (INCL. BRIEF DESCRIPTION OF MAJOR COURSE REQUIRMENTS)

Grades will be based on the following table:

| Activity | Percent | A+ | 100% | |
|---|---------|----|--------|--|
| Lab Grade | 40 | Α | 93-99% | |
| (The lab grade represents the submitted lab assignments) | 40 | Α- | 90-92% | |
| Final Project (A final project that needs to be submitted via Blackboard | 40 | B+ | 87-89% | |
| by the given deadline) (80% final project / 10% final presentation / 5% final | | В | 83-86% | |
| project proposal / 5% data check) | | B- | 80-82% | |
| Exam 1 (A written exam – date see below) | 10 | C+ | 77-79% | |
| Exam 2 | 10 | С | 73-76% | |
| (A written exam – date see below) | | C- | 70-72% | |
| | | D | 60-69% | |
| | | F | <60% | |

NOTE: Your final percentage will round to the nearest whole number, e.g., 89.2=89 but 89.6=90.

Exam #1 (in class exam)
TU, October 2, 2018 (during normal class time, 45 minutes)

Exam #2 (in class exam)
TU, November 13, 2018 (during normal class time, 45 minutes)

Exams policies

Exams are one form of student assessment. This course utilizes multiple methods for assessing student progress and performance to include exams, projects, and written assignments. There will be no make-ups or early assessments, with the exception of extreme personal hardship, which must be discussed with the instructor prior to the assessment date and agreed upon. In these limited, documented cases, the following policies apply: 1) the make-up exam is different from the original exam but no more difficult, and 2) the format of the exam may be changed.

Important Dates

August 27: First day of classes

September 3: Labor Day (University closed)

September 24 - October 19: Midterm progress reporting period (100-200 level classes)

September 30: Last day to drop class

October 2: Exam #1

October 8: Fall Break (Recess)

October 9: Monday classes meet instead of Tuesday classes

October 28: Selective Withdrawal deadline.

November 13: Exam #2

November 21 - 25: Thanksgiving Recess

December 4: Short Presentation: "Final Project"

December 4: Final Projects are due

December 8: Last day of classes

TENTATIVE COURSE OUTLINE – GENERAL DESCRIPTION OF SUBJECT MATTER *NOTE: This outline is subject to modification. Students will be notified of any changes. Students are encouraged to download the lecture slides from Blackboard.*

| Day | Date | Topic | Labs / Assignments |
|-----|-------|----------------------------------|---|
| TU | 8/28 | Syllabus & Course Policies | |
| | | Map Aesthetics | |
| TU | 9/4 | Thematic Cartography, Maps, | LAB1 |
| | | Map Design | |
| TU | 9/11 | Geographic Data | LAB2 |
| TU | 9/18 | Color Principles | LAB3 |
| TU | 9/25 | Typography and Maps | LAB4 |
| TU | 10/2 | Short Exam 1 (45 minutes) | LAB5 |
| TU | 10/9 | No class (Monday classes meet) | |
| TU | 10/16 | Projections and Coordinate | LAB6 |
| | | Systems | |
| TU | 10/23 | Data Classification / Choropleth | LAB7 |
| | | Mapping | |
| TU | 10/30 | Proportional Symbol Maps / | LAB8, Final Project Proposal Due (part of the |
| | | Cartograms | final project grade) |
| TU | 11/6 | Special Use Maps, Map Critique | LAB9 |
| TU | 11/13 | Short Exam 2 (45 minutes) | LAB10 |
| TU | 11/20 | Data Check Due (part of the | Work on Final Project |
| | | final project grade) | |
| TU | 11/27 | Final Project Critiquing | Work on Final Project |
| TU | 12/4 | Final Presentation | Final Projects are Due |