

**Geography and Geoinformation Science 411-001  
Advanced Digital Cartography**

Spring 2017

Credits: 3

Wednesdays 1:30 PM – 4:10 PM, Exploratory Hall 2310

**INSTRUCTOR INFORMATION**

Dr. Sven Fuhrmann

Associate Professor

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Office hours: Tuesdays 2:00PM-3:00PM, Wednesdays 12:30PM-1:30PM and by appointment

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**CLASSMATE CONTACT INFORMATION**

Name	E-mail	Phone

**CATALOG DESCRIPTION**

Design and production of full-color digital maps and information graphics, map cognition and use, and principles of desktop mapping.

**COURSE CONTENT**

Advanced Digital Cartography reflects on the theoretical principles of cartography and introduces novel geovisualization concepts. The course utilizes Adobe InDesign, Adobe Illustrator, ArcGIS and MAPublisher to create a range of digital mapping products. Students will also explore dynamic and interactive mapping platforms. Good cartographic product design guidelines, effective and efficient visual communication strategies and modern cartographic production processes will enable students to design a professional-grade cartographic atlas in a teamwork setting.

**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. Some sources are listed below; others may be added during the semester.

### **Other Materials**

Students will also 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 seminar will consist primarily of:

- Lab assignments,
- Self-initiated study and knowledge development,
- Written assignments,
- A project assignment, and
- Team Work

### **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**

Late work will only be graded if it is **submitted within 5 working days of the due date**. Please note that late assignments will be subject to a 10% reduction in the final 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.

### **Video and/or Audio Recording**

Video and/or audio recording and distribution of class 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 REQUIREMENTS)

Grades will be based on the following table:

Activity	Percent	A+	100%
Lab Assignments	30	A	93-99%
Final Project – A thematic cartography project that will be completed in group work over the course of the semester	60	A-	90-92%
Class participation (readings and discussions)	10	B+	87-89%
		B	83-86%
		B-	80-82%
		C+	77-79%
		C	73-76%
		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.*

## Midterm

None

## Final Exam

None

## Important Dates

January 23 – First day of classes

January 30 - Last day to drop with no tuition penalty

February 13 – Last day to drop with a 33% tuition penalty

February 24 – Final Drop Deadline (67% tuition penalty)

March 13 – March 19 – Spring Break (no classes)

May 3 - Final Projects are due.

May 6 – 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.*

Date	Topic	Exercises / Lab Assignments
1/25/2017	Syllabus & Course Policies Introduction	
2/1/2017	Atlases / Project Planning & Coordination	Lab1
2/8/2017	Digital Databases / Data Sources	Lab2
2/15/2017	Cartographic Design Principles / User Issues	Lab3
2/22/2017	Color Theory / Color Harmony	Lab4
3/1/2017	Cartographic Abstraction / 3D Cartography	Lab5
3/8/2017	Symbolization / Logos / Color Harmony	Lab6
3/15/2017	Spring Break	
3/22/2017	Typography and Lettering	Lab7
3/29/2017	Atlas Layout / Page Design / Index	Final Project
4/5/2017	No lecture (AAG conference)	Final Project
4/12/2017	Map Execution and Dissemination, Project Status Review	Final Project
4/19/2017	Final Project	Final Project
4/26/2017	Final Project Critiquing	Final Project
5/3/2017	Final Project Due	Final Project Grading