

GEOGRAPHY & GEOINFORMATION SCIENCE 415

Seminar in Geography

Spring 2021

Syllabus

1. INSTRUCTOR

Instructor: Dr. Matt Rice

Term: Spring 2021

Class-Section (CRN): GGS 415- DL1 (19111)

Modality: Primarily online asynchronous

Location: Online (Blackboard/Zoom)

Faculty Office Hours: Wednesdays, 2:30-4:00pm on Zoom

Instructor Email: rice@gmu.edu subject=[GGS 415]

Phone: (703) 957-9575

Contact and Office Hours: I can be reached via email or phone, with a response during weekdays of 24 hours. If you email after 5pm on Friday, you will receive a response by Monday at Noon. Students must activate and use their GMU campus email to facilitate contact. **I cannot communicate with you through a non-GMU email.** Please use a subject line prefix tag: [GGS 415].

2. COURSE DESCRIPTION

This course is designed as a **disciplinary seminar on geography**, and a GMU [writing intensive course](#). The course focuses on the associated fundamental scientific principles, theories, and techniques of geography, including geographic information systems, quantitative analysis, research design, and research paper writing. Students will learn about the discipline of geography, its history, and its contemporary practice. Students will learn how to design and carry out a research project, with a focus on the organization and written elements. Students will learn modes and methods of academic research, as well as the basic elements of the academic peer-review process. Student will learn how the Earth's features are modeled and stored in a computer information system. Students will learn how to use geographic information systems to answer geographic research questions and how to perform simple analytical procedures using geographic data. The writing intensive nature of the class means that students will devote time to successfully complete several written assignments totaling at least 3500 words, with feedback on drafts, revisions, editing, formatting, and citations.

Credit Hours for this course: 3

3. COURSE PREREQUISITES

Course prerequisites include GGS 300 (Quantitative Methods for Geographic Analysis) and GGS 310 (Introduction to Digital Cartography). Some students may find GGS 110 (Maps and Mapping) and GGS 311 (Intro. To GIS) useful, but they are not required.

4. COURSE EXPECTATIONS

1. Students are expected to participate in this online class weekly, and to read the assigned reading material.
2. This class requires dedication and organization. Proper preparation is expected every week. You are expected to log in to Blackboard each week and complete the assignments and activities on or before the due dates.
3. Students must check their GMU email messages on a daily basis for course announcements, which may include reminders, revisions, and updates.
4. It is expected that you will familiarize yourself with and adhere to the Honor Code. Student members of the George Mason University community pledge not to cheat, plagiarize, steal, and/or lie in matters related to academic work.
5. It is essential to communicate any questions or problems to me promptly so that we can work out any problems as soon as they arise.

5. LEARNING COMMUNITY

This course is taught online via Blackboard Courses (Log into <http://mymason.gmu.edu>, select the Courses Tab, and the course can be found in the Course List).

This course may use Zoom for online sessions. **In order to participate, you must be at a computer with a microphone** and optionally, a video camera.

In our online interactions, we must be respectful of one another. Please be aware that innocent remarks can be easily misconstrued. Sarcasm and humor can be easily taken out of context. When communicating, please be positive and diplomatic. I encourage you to use netiquette during any online discussions.

6. LEARNING OUTCOMES

By the end of this course, students will be able to:

1. Demonstrate a broad knowledge-base of the fundamental scientific theories, principals and techniques of the discipline of geography.
2. Demonstrate an understanding of the societal context of geographic practice, and articulate important historical events, contemporary developments, and future trends that shape the discipline of geography.
3. Apply and demonstrate key concepts of spatial analysis using commercial GIS software.
4. Given a specific geographic research problem, identify problem parameters, characterize data needs, assemble data, and perform analysis.
5. Effectively communicate results of analysis using written form, as well as with maps and graphics produced with GIS.
6. Develop the ability to edit and revise written documents through feedback, toward a goal of a final written research paper.

7. TECHNOLOGY REQUIREMENTS & EXPECTATIONS

General Hardware:

To complete this class and use Blackboard effectively, you will need access to a Windows or Macintosh computer with at least 8 GB of RAM and a reliable broadband Internet connection. A larger screen is recommended for better visibility of course material. You will need speakers or headphones to hear recorded content and a headset with a microphone is recommended for the best experience. For the amount of Hard Disk Space required to take a course such as this, consider and allow for: **1.** The storage amount needed to install any additional software and **2.** Space to

store work that you will do for the course. If you are considering the purchase of a new computer, please go see Patriot Tech at the BN College Bookstore: <https://gmu.bncollege.com/shop/gmu/home>

Software:

This course uses Blackboard as the learning management system. You will need a browser and operating system that are listed compatible or certified with the Blackboard version available on the myMason Portal. See [supported browsers](#). Log in to [myMason](#) to access your registered courses. Some courses may use other learning management systems. Check the syllabus or contact the instructor for details. Online courses typically use Acrobat Reader, Java (Windows), and QuickTime. Your computer should be capable of running current versions of those applications. GMU Information Technology Services recommends that you protect your computer from viruses: <https://its.gmu.edu/knowledge-base/does-mason-provide-antivirus-software/>.

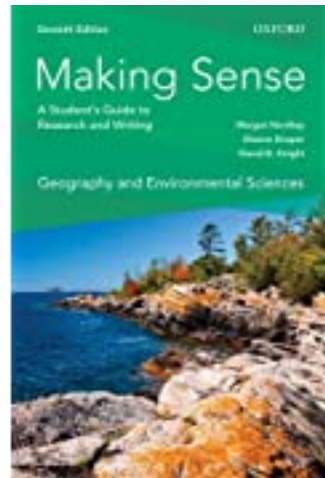
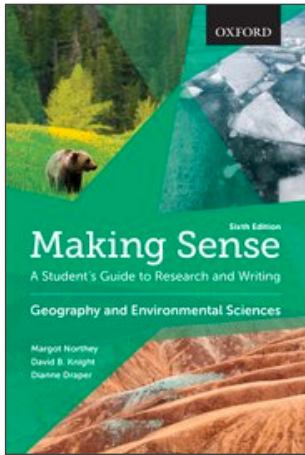
Students owning Macs or owning computer running Linux should be aware that some courses may use software that only runs on Windows, including ArcGIS. You can set up a Mac computer with Boot Camp or virtualization software so Windows will also run on it. This following webpage <https://support.apple.com/en-us/HT201468>) contains information about using Windows on a Mac in bootcamp mode. It is also possible to run Windows using a virtual machine on your Mac. Search “running windows on my Mac”. Computers running Linux can also be configured with virtualization software or configured to dual boot with Windows. Setting up Windows on your Mac can be a bit complicated, and will require some external technical support.

Note: If you are using an employer-provided computer or corporate office for class attendance, please verify with your systems administrators that you will be able to install the necessary applications and that system or corporate firewalls do not block access to any sites or media types.

Geographic Information Systems Software

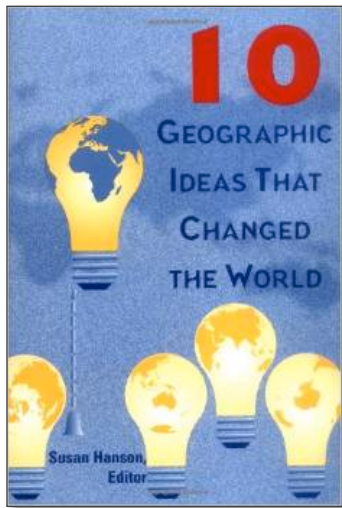
You will have a ArcGIS version provided for you through a software download link, and through the GMU Citrix Virtual Lab . **You need to install or otherwise have access to ArcGIS Pro v.2.5.2** This will require administrator-level access and control of a Windows PC computer or ability to use the GMU Citrix Virtual Lab environment: <https://its.gmu.edu/service/citrix-virtual-lab/>

8. REQUIRED & RECOMMENDED TEXTBOOKS



REQUIRED

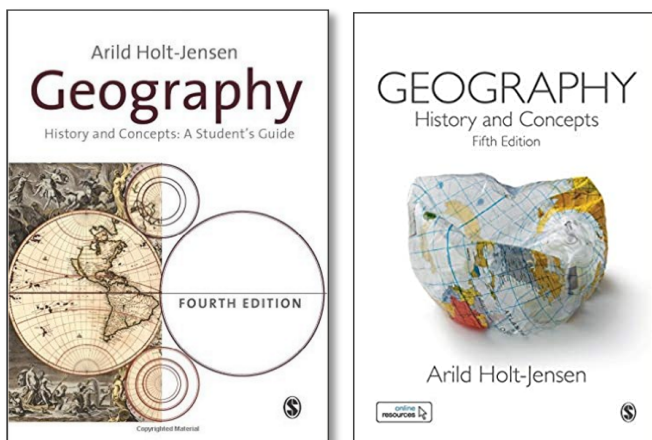
Making Sense in Geography and Environmental Sciences: A Student's Guide to Research and Writing,
6th ed. Margot Northey, David B. Knight, and Dianne Draper (editors) ISBN: 978-0195445824, **OR**
7th ed. Margot Northey, Dianne Draper, and David B. Knight (editors) ISBN: 978-0199026807



REQUIRED

Ten Geographic Ideas that Changed the World, by Susan Hanson (editor). Rutgers University Press, 1997.
ISBN: 9780813523576

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RECOMMENDED

Provided online / free by GMU Fenwick Library

Geography: History and Concepts: A Student's Guide, by Arild Holt-Jensen

4th edition: (October 8, 2009), ISBN: 9781412946506, **or**

5th edition: (April 28, 2018), ISBN: 9781526440150

NOTE: This book is available as an electronic resource through the Fenwick Library's Digital Collections: Follow the online resource link in the catalog record, while on campus or **after** authenticating with your MASON NetID:

https://wrlc-gm.primo.exlibrisgroup.com/permalink/01WRLC_GML/1giah39/alma9935160283404105

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9. PERFORMANCE-BASED ASSESSMENTS

You will achieve the course learning outcomes (**Syllabus Section 6**) through attending and participating in course lectures, reading the textbooks, preparing and writing reading summaries when required, participating in class discussions, working through methodology exercises, completing written assignments, and completing a course research paper, with associated submissions.

a. Reading Summaries: Each student will prepare a weekly textbook reading summary on the TEN GEOGRAPHIC IDEAS (Hanson) textbook using the Blackboard Journals tool. Each reading summary will be graded on both content and form, and collectively they will be worth 10% of the final grade. See the Written Assignment and Reading Summary Grading Rubric below.

b. Written Assignments: Each student will prepare several written assignments of variable nature and length based on geographic ideas, project topics, and lecture material. The written assignments will be graded on both content and form, and collectively will be worth 20% of the final grade. See the Written Assignment and Reading Summary Grading Rubric below.

c. Methodology Exercises: There will be 3 separate methodology assignments, focused on geographic data collection, analysis, graphical presentation, cartographic methods, and general world geography. These exercises will be worth 20% of the final grade.

d. Final Research Paper: Students will prepare a final research paper for the course, which will be due on the final day of class. This paper will have several deliverables throughout the term, each of which will be graded and will contribute to the student's final research paper grade. The process of writing the course research paper will include the development of a pre-proposal, article abstracts, a formal project proposal, data checks, map checks, and a full-length draft of at least 2000 words. Feedback on this full-length draft will contribute to a substantially revised final paper of at least 1800 words, which will be due at the end of the term. The research paper submissions will be worth 35% of the final grade.

e. Final Examination: Students will prepare a final examination based on course readings and discussion. This exam will be released via Blackboard on the last day of class and will be due on the final exam date. This final exam will be worth 15% of the grade.

10. GRADING SUMMARY

Students will be evaluated in the following areas, with the following grade weighting:

- Reading Summaries (10%)
- Written Assignments (20%)
- Methodology Exercises (20%)
- Final Research Paper (35%)
- Final Examination (15%)

Grades are assigned using a standard scale:

A+	> 99+
A	93 – 98.9
A-	90 – 92.9
B+	87 – 89.9
B	83 – 86.9
B-	80 – 82.9
C+	77 – 79.9
C	73 – 76.9
C-	70 – 72.9
D	60 – 69.9
F	0 – 59.9

11. RUBRICS

Written Assignments and Reading Summaries

(1) Instructions:

Each student will prepare a series of written assignments based on course readings, web material, journal articles, class lectures, and other assigned material. The written assignments will be evaluated

and assessed by the Instructor and Teaching Assistant using the standard rubric below. Written assignments should be concise, comprehensive syntheses of the assigned material, and can include quotes, references, and relevant personal experiences or anecdotes. The length of a typical written assignment will be 200-500 words, unless otherwise indicated in the assignment.

(2) Rubric (Adapted from <http://ctfe.gmu.edu/teaching/grading/sample-rubric-for-grading-a-research-paper/>)

Written Assignment Rubric				
Criteria	Outstanding	Good	Fair	Poor
Organization	Written Assignment includes a short introduction, a body, and a short synopsis, and is well organized	The Written Assignment is missing an introduction or synopsis and has minor organizational errors	The Written Assignment is missing an introduction and a synopsis and is poorly organized	The Written Assignment lacks coherent organization and structure and is missing an identifiable introduction, body, and synopsis
Length	200-500 words, or as indicated in assignment	Minor length deviation (<20%)	Major length deviation (20%-40%)	Length does not adhere or approach length requirements (> 40% deviation)
Syntax	Correct grammar and syntax	Minor syntax, grammar, and spelling errors	Multiple syntax, grammar, and spelling errors throughout Written Assignment	Written Assignment is replete with syntax, grammar, and spelling errors
Research and Content	The Written Assignment contains relevant material from the lecture and assigned content material, and extends the material through a well-presented synthesis	The Written Assignment contains material from the lecture and assigned content, with minor deficiencies, omissions, or irrelevant content	The Written Assignment only partially relates to the assigned content and lecture material and contains much irrelevant content	The Written Assignment does not relate to the lecture or readings at all
Points	90-100	75-90	50-75	50 or less

Methodology Exercises

Each methodology exercise will be worth 20 points, with 1 point for each substantive answer indicated in the assigned problem set, or other significant methodological step. With regard to numerical answers, a complete answer with the relevant units will be worth full credit for that problem. Students start with 20 points and receive a 1 point deduction for incorrect answers or incorrect execution of a method, and a ½ point deduction for minor errors such as a lack of units where required. Incorrect or incomplete answers not including an omission of units (ft., yards, acres, miles, meters, etc.) will receive a full point deduction. Methodology exercises will have a full written evaluation and specific indicators of reasons for point deductions. Methodology exercises should be submitted through Blackboard in Microsoft Word format or other relevant format as specified in the assignment. Cartographic work must be submitted in PDF format in highest quality.

Final Research Paper

(1) Instructions:

Each student will prepare a final research paper based on a pre-defined research proposal, literature review, analysis, synthesis, ancillary material, journal articles, class lectures, and other assigned material. The research paper will be evaluated and assessed by the Instructor and Teaching Assistant using the standard rubric below. The research paper should be a comprehensive synthesis of the proposed topic and can citations, quotes, illustrations, maps, graphics, images, references, and any other relevant material. The length of the research paper proposal will be 300-500 words, the draft paper submission will be at least 1200 words, and the final paper will be at least 1800 words, or approximately 5-7 pages, double spaced, exclusive of graphics, maps, images, charts, tables, and references.

(2) Rubric (Adapted from <http://ctfe.gmu.edu/teaching/grading/sample-rubric-for-grading-a-research-paper/>)

Research paper Rubric				
Criteria	Outstanding	Good	Fair	Poor
Organization	Research paper includes a relevant title, abstract, introduction, conceptual framework, literature review, methodology, results and conclusions, future work, and reference sections. The content is well organized.	The research paper is missing a section and has minor organizational errors.	The research paper is missing several section and is poorly organized.	The research paper lacks coherent organization and structure and is missing an identifiable structure.
Length	Range as indicated for assignment	Minor length deviation (<15%)	Major length deviation (15%-30%)	Length does not adhere or approach length requirements (> 30% deviation)
Syntax	Correct grammar and syntax	Minor syntax, grammar, and spelling errors	Multiple syntax, grammar, and spelling errors throughout Research paper	Research paper is replete with syntax, grammar, and spelling errors
Research and Content	The research paper is based on an approved, well-written research proposal. The final paper contains relevant content addressing the proposed area of research. The final paper uses appropriate analytical methods and relevant maps & graphics.	The research paper contains relevant material, but deviates in some way from the proposal and lacks relevance in content. The research paper is missing some relevant analysis.	The research paper only partially relates to the proposed research, and many of the research methods are inappropriate, incorrectly applied, or missing.	The research paper does not relate to the proposal and lacks appropriate research analysis and content.
Points	90-100	75-90	50-75	50 or less

11. COURSE SCHEDULE

You are responsible for keeping up with the textbook readings, lectures, Written Assignments, discussions, GIS tutorials/methodology exercises, and assessments. No makeup exams will be available. Readings assigned for the week & session should be completed before the scheduled date. **Any changes to this schedule will be announced via email and posted to the course Blackboard page.**

	<u>Dates</u>	<u>Regional Review</u>	<u>Holt-Jensen (Geography, 5th)</u>	<u>Hanson (10 ideas)</u>	<u>Northey et al. (Making Sense, 6th ed.)</u>	<u>Assignments</u>
Week 1	Jan. 25-31	<i>Syllabus Review, Course Requirements, Introduction</i>				
Week 2	Feb. 1-7	United States	I. What is Geography?	Intro pp.1-13	1. Thinking and Writing pp.1-20	Methodology Assignment #1: Choropleth Map of US
Week 3	Feb. 8-14	United States	I. What is Geography?	1 pp.14-39	2. Searching and Researching pp.21-57	
Week 4	Feb. 15-21	United States	II. The Roots of Geography	2 pp.40-59	3. Writing and Reading Lecture Notes pp.58-67	Written Assignment #1: Personal Travel Narrative
Week 5	Feb. 22-28	United States	II. The Roots of Geography	3 pp.60-88	4. Writing a Report on a Book or an Article pp.68-74	
Week 6	Mar. 1-7	Canada / North America	III. From Cosmography to an Institutionalized Discipline	3 pp.60-88	5. Writing an Essay pp.75-93	Methodology Assignment #2: Statistical Analysis Assignment
Week 7	Mar. 8-14	Europe	III. From Cosmography to an Institutionalized Discipline	4 pp.87-107	5. Writing an Essay pp.75-93	Written Assignment #2: Pre-proposal + Article Abstract
Week 8	Mar. 15-21	Europe	IV. The Regional Tradition	5 pp.108-124	6. Writing a Proposal, Research Paper, and Thesis pp.94-105	Written Assignment #3: Project/Paper Proposal
Week 9	Mar. 22-28	Europe	V. The Growth of Spatial Science	6 pp.125-144	7. Quotations and Documentation pp.106-132	
Week 10	Mar. 29-Apr. 4	Africa	VI. Paradigms and Revolutions	7 pp.145-162	8. Participation, Group Work, Presentations pp.133-152	Methodology Assignment #3: Esri Story Map Assignment
Week 11	Apr. 5-11	Africa	VII. Positivism and Its Critics	8 pp.163-181	11. Doing Field Work and Writing about It pp.173-185	
Week 12	Apr. 12-18	Latin America	VIII. Alternatives to Spatial Science	9 pp.182-204	12. Illustrating Your Work pp.185-214	Draft Final Course Paper due
Week 13	Apr. 19-25	Latin America	IX. Poststructuralism and Beyond	10 pp.205-226	13. Words: Gender, Race, and Other Sensitivities pp.215-221	
Week 14	Apr. 26—May	Asia & Oceana	X. Geographical Tasks			Final Course Paper Due
Exam Period	May 3-10	The Final Exam will be released via Blackboard on May 3rd and will be due on Sunday, May 9th at midnight.				

12. STUDENT EXPECTATIONS

Academic Integrity

It is expected that students adhere to the [George Mason University Honor Code](#) as it relates to integrity regarding coursework and grades. The Honor Code reads as follows:

“To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the University Community have set forth this: Student members of the George Mason University community pledge not to cheat, plagiarize, steal and/or lie in matters related to academic work.”

More information about the Honor Code, including definitions of cheating, lying, and plagiarism, can be found at the Office of Academic Integrity website at <https://oai.gmu.edu>

Discussion of work among students is encouraged. Collaboration and active participation in group discussions is important, but final work should reflect your own thinking and all submitted assignments **must be in your own words and reflect your individual work**. I reserve the right to use GMU-sanctioned tools for detecting and documenting plagiarism. If you have questions about what constitutes plagiarism, please ask me.

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 will be sent to students solely through their Mason email account. [See <http://masonlive.gmu.edu/>]

Patriot Pass

Once you sign up for your Patriot Pass, your passwords will be synchronized, and you will use your Patriot Pass username and password to log in to the following systems: Blackboard, University Libraries, MasonLive, myMason, Patriot Web, Virtual Computing Lab, and WEMS. [See <https://password.gmu.edu/index.jsp>].

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>].

13. DIVERSITY

Diversity is an important in an academic environment, and is a priority for George Mason University. See: <http://ctfe.gmu.edu/professional-development/mason-diversity-statement/>

“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.

The reflection of Mason's commitment to diversity and inclusion goes beyond policies and procedures to focus on behavior at the individual, group and organizational level. The implementation of this commitment to diversity and inclusion is found in all settings, including individual work units and groups, student organizations and groups, and classroom settings; it is also found with the delivery of services and activities, including, but not limited to, curriculum, teaching, events, advising, research, service, and community outreach.

Acknowledging that the attainment of diversity and inclusion are dynamic and continuous processes and that the larger societal setting has an evolving socio-cultural understanding of diversity and inclusion, Mason seeks to continuously improve its environment. To this end, the University promotes continuous monitoring and self-assessment regarding diversity. The aim is to incorporate diversity and inclusion within the philosophies and actions of the individual, group and organization, and to make improvements as needed."

14. RELIGIOUS HOLIDAYS

I am generally aware of some religious holidays and observations, and will help minimize difficulties for students of different faiths in terms of scheduling course assignments. It is the student's responsibility to speak to me in advance should their religious observances impact their participation in class activities and assignments. [See: <http://ulife.gmu.edu/calendar/religious-holiday-calendar/>]

15. SPECIAL NEEDS

If you have a documented learning disability or other condition that may affect academic performance you should: **1)** make sure this documentation is on file with the Office of Disability Services (SUB I, Rm. 2500; 993-2474; <http://ds.gmu.edu/>) so that they can make a determination about the accommodations you need; and **2)** communicate with me to discuss your accommodation needs or have the Office of Disability Services do so. I can provide proper accommodations with documentation and professional advice from the Office of Disability Services.

16. STUDENT SERVICES AND UNIVERSITY RESOURCES

University Libraries

The George Mason University Libraries provides resources for distance education students. For access to these resources and services, see <http://library.gmu.edu/for/online> .

Writing Center

The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing. You can now sign up for writing assistance through the Office of Digital Learning Online Writing Center: <https://writingcenter.gmu.edu/>

Counseling and Psychological Services

The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional

counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu>].

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act of 1974 (FERPA), also known as the "Buckley Amendment," is a federal law that gives protection to student educational records and provides students with certain rights. [See <http://registrar.gmu.edu/ferpa/>]