George Mason University

Department of Geography and Geoinformation Sciences Fall Semester 2015

World Food and Population GGS 581-001 Course Syllabus

Instructor: Mr. F. H. Dillon, III

Office: Exploratory Hall, Room 2220

Class Location: Exploratory Hall, Room L111

Meeting Time: Wednesday, 4:30-7:10 p.m.

Office Hours: Wednesday, 7:30-8:00 or by appointment

Email: fdillon@gmu.edu

Course Blackboard Page: mymasonportal.gmu.edu

Course Overview: The focus of this course will be on the geography of agriculture as a global food production system. Particular attention will be paid to the interaction of cultural and environmental factors in shaping the variations in agricultural forms observed around the world. The course will include both mandatory and optional field observations of agricultural activities in addition to regular class meetings. Students will demonstrate a comprehensive understanding of agriculture in general and present the results of research on a specific agricultural issue in particular.

Course Objectives:

Based upon the reading and class discussion, students will be able to:

- 1. define agricultural geography and describe the principal geographical concepts associated with the agricultural practices of different world regions;
- 2. explain how environmental factors, such as climate, soils, topography, and vegetation shape agriculture;
- 3. explain how cultural factors, such as gender, economics, diet, religion, and land tenure, affect agriculture;
- 4. explain the differences among agricultural forms, such as subsistence and commercial agriculture, and suggest how these forms develop in response to cultural and environmental factors:
- 5. analyze the effects of population pressure, governmental policy, and farmers' decisions on food production systems.

Required Text:

- 1. David Grigg, *An Introduction to Agricultural Geography*, 2nd ed., Routledge, 1995.
- 2. John Fraser Hart, *The Rural Landscape*, Johns Hopkins University Press, 1998¹

Your choice of one of the following books:

- Jared Diamond, Guns, Germs, and Steel: The Fates of Human Societies, Norton, 1997 (ISBN 0393317552)
- Daniel Hillel, Out of the Earth: Civilization and the Life of the Soil, California, 1991 (ISBN 0520080807)
- Felipe Fernandez-Armesto, Near a Thousand Tables: A History of Food, Free Press, June 2002 (ISBN 0743227409)
- Alfred Crosby, The Columbian Exchange, Praeger, 2003 (ISBN 97802275980733)
- Charles Mann, 1493: Uncovering the new world Columbus created, Alfred A. Knopf, 2011 (ISBN 9780307265722)

These books are readily available from Amazon.com or Barnes and Noble Online, but are also available on reserve in the library.

Other readings as assigned; these will be available on reserve in the Johnson Center library or on Blackboard.

Optional Text:

You will find a good world atlas, preferably *Goode's World Atlas*, 21st edition, Rand McNally, which will be used in class, useful. Used copies of Goode's are frequently available in the bookstore; however, any good

¹ Available as an electronic resource from Mason Library at http://magik.gmu.edu/cgi-bin/Pwebrecon.cgi?BBID=2842138

world atlas by Nystrom, Hammond, or Rand McNally will suffice as long as it includes global and regional maps of climate, soils, crop production, land use, vegetation regions, and nutrition.

Student Requirements:

Because this is a graduate level course students are expected to read and write critically, and conduct significant research outside the classroom. Students are responsible for all assigned reading and lecture material.

Examinations and Examination Policies:

- 1. There will be two Exams including a Mid-term and a comprehensive Final Exam.
- 2. **NO** makeup exams will be given except under the most extraordinary circumstances (e.g. hospitalization). Makeup arrangements will be requested in writing in advance of the exam.
- 3. The Final Exam will **NOT** be administered early; please plan ahead.

Field Observations:

- 1. Students will participate in a field observation of a selected agricultural activity and submit a written observation report for each (see Annex A).
- 2. Additional, optional, observations are planned and students are encouraged to participate in these observations as much as possible.

Research and Analysis:

Prepare a **geographically based** analysis of a selected agricultural problem to be presented in class. Your written findings will be submitted as a research paper (see Annex B).

Written Work:

- 1. Field observation reports (see Annex A).
- 2. A geographic assessment of an agricultural issue (see Annex B).
- 3. A review of the Diamond, Hillel, Fernandez-Armesto, Crosby, or Mann book (see Annex C).
- 4. Papers cannot be accepted beyond the date indicated on the class schedule.

Academic Integrity:

Academic integrity is essential. Each individual is expected to do his or her own work. Violations of the University Honor Code will not be tolerated and will result in course failure.

Grading Scheme and Policy:

Letter grades of A, A-, B+, B, B-, C will be assigned for completion of this course based on the cumulative score of all evaluated work. Rather than assign individual letter grades for the individual projects listed below, they will be evaluated on a per cent basis from which the final, total, score will be determined. As an upper level course the following grading scale will be employed: A = 100-95, A = 94-92, B = 91-90, B = 89-83, B = 84-81, C = 80-70, F = 69 and below. A grade of Incomplete must be requested in writing in advance, no later than 11/19, and can only be approved with a passing grade average.

Mandatory Field Trip Observations 10% Paper 25% Presentation 10% Midterm 20% Final 20% Book Review 15% (due 11/18)

Key Dates:

9/2 Class Begins 12/9 Last date for submission of written 9/8 Last day to add course work.
10/21 Mid Term Exam 12/16 Final Exam - 7:30-10:15 p.m.
11/25 No Class Thanksgiving Break

Tentative Class Schedule (As of 18 July 2015)

Week	Date	Topic	Assignment	Reading
1	9/2	Introduction		Grigg, Chap 1
2	9/9 ²	Biology of Agriculture		Grigg, Chap 2
3	9/16	Climate		Grigg, Chap 3
4	9/23	Soils/Topography		Grigg, Chap 4,5;
				Hart, Chap 6
5	9/30	Food Consumption Patterns		Grigg, Chap 6
6	10/7	Agricultural Economics		Grigg, Chap 7
7	10/14	Agricultural Markets		Grigg, Chap 10
8	10/21	Mid Term Exam / Land		Grigg, Chap 13;
		Ownership		Hart, Chap 7,8,
				and 12
9	10/28	Culture and Farming		Grigg, Chap 15
10	11/4	Spatial Diffusion and		Grigg, Chap 14
		Agriculture		
11	11/11	The State and the Farmer		Grigg, Chap 9
12	11/18	Agricultural Innovation	Book review due	Grigg, Chap 8
		Modernization of Agriculture		
	11/25	No class – Thanksgiving		
13	12/2	Agriculture and Environment		Grigg, Chap 16
14	12/9	Graduate Presentations	Research paper due	
Final	12/16	4:30-7:15 p.m.		

Field Trips – TBD announcement will be published separately.

Annex A: Field Observation Reports

Annex B: Research Paper Annex C: Book Review

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² You must be enrolled in the course not later than 8 September to receive a grade. No "Force Adds" are possible on or after this date. Check Patriot Web for enrollment status.

Annex A

Field Observation Reports

Students are required to complete **one mandatory**, and preferably one additional (optional for extra credit), field observation exercise during the course. The purpose of these observations is to provide first hand knowledge of various agricultural systems and the physical and cultural factors that shape such systems. The list of tentative observation sites is listed in the attached appendix. As there will most likely be limited seats for each trip, participation will be on a first come, first served basis. Detailed observation instructions will be provided prior to each trip and tailored to the activities under observation.

Following each trip, participants will submit a written assessment of their observations. Every student must submit at least one such observation. The assessment will consist of a minimum four page observation report consisting of the following:

- a. description of site location and activity
- b. significant physical factors (climate, soil, slope, etc.) shaping the agricultural system observed
- c. significant cultural factors (economics, technology, etc.) shaping the agricultural system observed
- d. assessment of how this observation contributed to your understanding of geographical variations in agricultural systems

You should tie in assigned and outside readings that relate to the type of activity under observation. Completion of a report for the second, optional, field observation will be evaluated on an extra credit basis.

The format for the review will be four pages minimum, double spaced with one inch margins and using a 10 or 12 pitch font. Your name, student number, the location, and date of the observation will appear at the top of the first page. References in the body of your review, if you refer to readings, should be cited in the APA style.

The evaluation of reports will be based on the specific items listed above as well as the effectiveness of the writing.

Mechanics - including following the format, spelling, grammar, and punctuation. Organization and Logic - including cohesive logical development of your perspective. Intellectual Rigor - including support for you statements; no vague generalities.

Reports are due as indicated in the class schedule, generally one week after the trip. Late papers will probably lose points.

You should never submit a paper that has not been edited. In the age of "spellcheckers" spelling errors indicate sloppy work. If you lack a spell check system, try a dictionary. If you are not comfortable writing, or English is not your first language, get some help. Use the Writing Center. At a minimum have a friend preview your work before you submit it for a grade.

Appendix 1 to Annex A

Tentative List of Observation Sites

Location	Date	Remarks
Claude Moore Colonial Farm, McLean, VA	19 Sep	\$3.00 entrance fee; self drive
Fauquier County dairy farm	26 Sep	\$10.00 entrance fee; GMU
	(tentative)	van (depart from Starbucks)
Winchester Agricultural Research	TBD	GMU van
Station (tentative)		(depart from Starbucks)

Annex B GGS 581

Research Paper

The purpose of the research project is to provide an opportunity for more detailed study of a selected aspect of agriculture related to its **geographical patterns**. Ideally, the topic of your project should align with the broader theme of your graduate study. There are two lines of research you may pursue – (1) the application of the mapping sciences to agriculture or (2) a topic *explicitly geographic* in nature. To be geographical, the topic should address the following three questions: (a) Where is it? (b) Why is it there? (c) What is the significance of this location? Once you have settled on a topic, provide a brief problem statement outlining your choice.

Research

Based on the course content, you should select a topic that expands on your study of agriculture as a food production system. As a research paper this project is intended to be an overview of the current scholarship in the selected area as well as personal insights derived from this study. The principal component of the project is a thorough literature review pertaining to a specific problem statement. You will also want to consider the implications and connections that develop from your research. The findings of your research will be presented both orally and in writing.

Paper

The results of your research will be presented as a written paper of no more than twelve pages. Included in the paper will be the following:

- a. Description of the problem statement
- b. A summary of the literature review
- c. An assessment of the evidence pertaining to the problem statement (facts bearing on the problem)
- d. A synthesis of the information collected
- e. A conclusion including a summary of the findings and their significance
- f. An annotated bibliography of the sources cited in the body of the paper (does not count against page total)
- g. Maps bearing on the topic **are** required (remember, it **is** a geography paper)

Proper references are essential in this kind of paper. Use an APA style for your references in the body of the text.

For additional help in preparing your paper consult <u>Introduction to Scientific Geographic Research</u> by Haring, et al, especially chapters 3 and 8.

The format of the paper should include the following:

- a. title page (name, student number, title)
- b. abstract (250 word synopsis)
- c. table of contents, list of illustrations and maps
- d. body (no more than 12 pages)
- e. annotated bibliography

Page format will be one-inch margins, 10 to 12 pitch fonts. Please use your spellchecker.

The paper will be evaluated on the following basis.

Mechanics – including following the format, spelling, grammar, and punctuation. Organization and Logic – include cohesive, logical development of your idea.

Intellectual Rigor – including support for your statements, no vague generalities.

Presentation

Each graduate student will prepare a poster presentation of your paper topic for presentation to the class on 9 December. I will divide the class in half alphabetically with last names A-L discussing their topic first from 4:30-5:45pm and names M-W from 5:55-7:10pm.

Use the following guidelines for your presentation:

Major Sections

- Problem Statement or Research Question: What is your paper about?
- □ Summary of the main points of your findings: Describe what you learned.
- Conclusions: Summarize your findings.
 - ✓ What is the significance of your paper?
 - ✓ How does it tie into what discussed in class?
 - ✓ Based on your paper, are there other areas of research/interest you have identified?
- □ References: What were your principal sources of information?

Organize your poster around the four (or more) main sections. The three panel "science fair" poster board available in office supply stores may help organize your layout, but imaginative use of plain poster board can be just as effective. Remember this is a visual presentation, use graphics (e.g. charts, diagrams, maps) to illustrate your discussion. Avoid a lot of small, dense text; make the information easy to read. Neatness counts, consider using a presentation application like PowerPoint for building your poster. I will make my laptop available for running a PowerPoint show (I can support two people). If you have access to a laptop, perhaps you would consider sharing with a classmate.

Don't expect that you can cover your topic in the same detail as in your paper. Select what you think are the most important points.

This should be fun! I am hoping the more informal setting will help everyone feel more comfortable sharing what he or she learned in his or her paper.

Annex C GGS 581

Book Review

Each student will read and prepare a review of a book selected from the list below. The review should focus on how this book has influenced your thinking about the geographic nature of agriculture and food. You should also be prepared to share your impression of the book with your classmates. During the last portion of the semester I may ask you to present a short (5 minute) talk about the book you read including any recommendation.

The review should be 4-6 pages in length, double-spaced, with one-inch margins, and a 10 or 12 pitch font. This is a review and not a synopsis of the book. Begin with a short (one page) overview (who, what, where, when) of the book. The balance of the review should weigh the author's consideration of agriculture or food from geographical perspective; include examples. Finally, your summary should address the following two questions:

- How has this book influenced your thinking about geography and agriculture?
- Does your understanding of the influence of geographical factors change your perspective after reading this book?

The book review will be evaluated in terms of the logical development of your argument and the manner in which you evaluate the geographical perspective of the author. Naturally, effective writing and good spelling count.

- Jared Diamond, Guns, Germs, and Steel: The Fates of Human Societies, Norton, 1997 (ISBN 0393317552)
- Daniel Hillel, *Out of the Earth: Civilization and the Life of the Soil*, University of California Press, 1991 (ISBN 0520080807)
- Felipe Fernandez-Armesto, Near a Thousand Tables: A History of Food, Free Press, June 2002 (ISBN 0743227409)
- Alfred Crosby, *The Columbian Exchange*, Praeger, 2003 (ISBN 97802275980733)
- Charles Mann, 1493: Uncovering the new world Columbus created, Alfred A. Knopf, 2011 (ISBN 9780307265722)