Undergrad AS Semester Proposal

To: OAA
Date: 6/14/2010

Cover Letter for Proposals from the Department of Geography

This is the transmittal cover letter to the Office of Academic Affairs that reflects the efforts by the Department of Geography under Quarter to Semester Conversion.

The department used a series of committee and special purpose task forces to review programs and courses. Having recently proposed substantial revisions to our majors, we were in relatively good position to begin the Q to S process.

There has been a tremendous effort to accomplish these planned changes, with commendable input from Professor Becky Mansfield (Undergraduate), Jay Hobgood (Atmospheric Science), and Darla Munroe (Graduate). The graduate level documents are still being finalized.

The department recommends approval of these changes, which by and large are converted with minimal changes to program goals and/or curricular requirements at the undergraduate level. A recently approved set of revisions to the Majors has been incorporated into our planned semester version. *[There are minimal name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program, minimal or no changes in program goals or content.]*

The graduate courses are minimally changed, but there is expected to be a complete re-write of our graduate manual to organize these classes in a way that conveys greater advisor flexibility. The department will seek appropriate approval for any substantive track or programs changes built around our existing graduate courses.

The following are the programs in the department:

a. Undergraduate bachelors degree programs and/or majors

1. Environment and Society (BA)
2. Climatology and Physical Geography Specialization (BS)
3. Spatial Analysis (BS)
4. Urban, Regional and Global Studies (BA)
5. Geographic Information Science (BS) Tagged Major, pending
6. Atmospheric Science (BS) Tagged Major, pending

b. Undergraduate minors
A minor in geography is available to any Arts and Sciences student who is not already majoring in geography.

Undergrad AS Semester Proposal

c. Undergraduate associate degree programs
n/a

d. Graduate degree programs

1. M.A. in Geography
2. Ph.D. in Geography
3. M.S. in Atmospheric Science
4. Ph.D. in Atmospheric Science

e. Graduate minors
n/a

f. Graduate certificate programs
n/a

g. Graduate interdisciplinary specializations

Graduate Interdisciplinary Specialization in Geo-Spatial Data Analysis.

Since the interdisciplinary specialization requires elements from many other degree programs, we plan to finalize these syllabi and arrangements after the initial round of graduate degree courses has been screened.

h. Professional degree programs
n/a

i. Combined programs (e.g., BS/MS, Ph.D./ MD)
n/a

For the record, no programs are being withdrawn. The details in the balance of the template are incorporated by reference, and are being revised to ensure technical compliance with the templates.

Thank you for attention to these proposals

Morton O'Kelly
Professor & Chair
Department of Geography

Program Rationale Statement

This is a new major, in its last stages of approval (Board of Regents approval expected in the 2010-2011 Academic Year). Because it has not yet been approved and implemented, we made minimal changes. The current program proposals were developed by the Undergraduate Studies Committee with consultation with faculty. A consensus was achieved through discussion via email and at faculty meetings. The only change for semesters is that one course (GEOG 5200 Elements of Cartography) has been added to the list of electives.

Note on 5000 level courses in Atmospheric Sciences (query from CAA Subcommittee)
The courses in this program are shared between the undergraduate and graduate programs. These courses provide very specific knowledge and skill sets that are necessary for and accessible to students in both programs. It would not make sense for us to offer two versions of these courses (UG and G) because the same material would be covered in them.

The first courses in each of the sequences (e.g. 520/5900 Climatology) provide more basic knowledge and skills, and are prerequisite to the subsequent courses, also at the 5000-level. Hence, in our curriculum maps some of the 5000-level courses are at the "beginning" level for a particular goal, while other 5000-level courses are "intermediate" or "advanced." Further, the same course can be "beginning" with regard to one goal and "intermediate" with regard to another.

Undergraduates generally start taking these courses in their junior year, which is because they take the math and science prerequisites during their first two years. In our experience, junior and senior students are quite capable of taking 5000-level courses.

Note also that the programs currently under review are straight conversions of our existing programs, which were approved by CAA in Jan of 2010 (less than a year and a half ago), and by the Board of Trustees last summer. We have not been able to implement the new majors because they have yet to be approved by the Board of Regents (so it did not make sense to change them in any substantial way). However, we have had an Atmospheric Sciences specialization as part of the Geography major for many years. This specialization also has the major "start" with 600/5000-level courses. This specialization has been highly effective, and it was based on its success that we decided to propose the new major along these lines. In other words, the level of these courses has not been a barrier to our students.

Undergrad AS Semester Proposal

List of semester courses in the program (for list of all GEOG and AS courses see App A)

Segment of Program	Semester #	Semester course name	Units
Required Prerequisites			
	Math 1251	Calculus and Analytic Geometry I	5
	Math 1252	Calculus and Analytic Geometry II	5
	Math 2253	Calculus and Analytic Geometry III	5
	Math 2455	Differential Equations and Their Applications	5
	Physics 1250	Introductory Physics: Particles and Motion	5
	Physics 1251	Introductory Physics: Electricity and Magnetism	5
	Chemistry 1XXX	General Chemistry	5
	Statistics 2450	Introduction to Statistical Analysis	3
Core Requirements. (26 hours)			
	AS 2940 OR GEOG 5900	Basic Meteorology OR Climatolotgy	3
	AS/GEOG 5940	Synoptic Meteorology Laboratory	2
	5921	Boundary Layer Climatology	3
	5922	Microclimatological Measurements	3
	5941	Synoptic Analysis and Forecasting	3
	5942	Severe Storm Forecasting	3
	AS 5950	Atmospheric Thermodynamics	3
	AS 5951	Dynamic Meteorology I	3
	AS 5952	Dynamic Meteorology II	3
Major Electives (Choose two courses from the list below; 6 hours)			
	AS 5901	Climate System Modeling: Basics and Applications	3
	3901H OR 3900	Global Climate and Environmental Change OR Global Climate Change: Causes and Consequences	3
	3882	Integrated Earth Systems: Confronting Global Change	3
	5200	Elements of Cartography	3
	5220	Fundamentals of Geographic Information Systems	3
	5270	Geographic Applications of Remote Sensing	3
Successor to	ES	Principles of Oceanography	3
	CIVILEN 5130	Applied Hydrology	3
	CIVILEN 5420	Remote Sensing of the Environment	3

Semester Advising Sheet

Atmospheric Science BS Advising Sheet SEMESTERS			
Segment of Major Program and Course Number	**Course name**	**Credit hours**	**Grade**
Required Prerequisites or Supplements to the Major			
Math 1251	Calculus and Analytic Geometry I	5	
Math 1252	Calculus and Analytic Geometry II	5	
Math 2253	Calculus and Analytic Geometry III	5	
Math 2455	Differential Equations and Their Applications	5	
Physics 1250	Introductory Physics: Particles and Motion	5	
Physics 1251	Introductory Physics: Electricity and Magnetism	5	
Chemistry 1XXX	General Chemistry	5	
Statistics 2450	Introduction to Statistical Analysis	3	
Core Requirements. (26 hours)			
AS 2940 OR GEOG 5900	Basic Meteorology OR Climatolotgy	3	
GEOG 5921	Boundary Layer Climatology	3	
GEOG 5922	Microclimatological Measurements	3	
AS/GEOG 5940	Synoptic Meteorology Laboratory	2	
GEOG 5941	Synoptic Analysis and Forecasting	3	
GEOG 5942	Severe Storm Forecasting	3	
AS 5950	Atmospheric Thermodynamics	3	
AS 5951	Dynamic Meteorology I	3	
AS 5952	Dynamic Meteorology II	3	
Major Electives (Choose two courses from the list below; 6 hours)			
AS 5901	Climate System Modeling: Basics and Applications	3	
GEOG 4901H OR 4900	Global Climate and Environmental Change OR Global Climate Change: Causes and Consequences	3	
GEOG 3882	Integrated Earth Systems: Confronting Global Change	3	
GEOG 5200	Elements of Cartography	3	
GEOG 5220	Fundamentals of Geographic Information Systems	3	
GEOG 5270	Geographic Applications of Remote Sensing	3	
Successor to ES	Principles of Oceanography	3	
CIVILEN 5130	Applied Hydrology	3	
CIVILEN 5420	Remote Sensing of the Environment	3	
	Total Program Hours		
	Minimum Program Hours	32	
	Prerequisite Hours	38	
Advisor Signature and Date:			
Name:			
Major/Specialization:			
Campus ID:			

Quarter Advising Sheet

Atmospheric Science BS Advising Sheet QUARTERS			
Segment of Major Program and Course Number	**Quarter course name**	**Credit hours**	**Grade**
Required Prerequisites or Supplements to the Major			
MATH 151	Calculus and Analytic Geometry I	5	
MATH 152	Calculus and Analytic Geometry II	5	
MATH 153	Calculus and Analytic Geometry III	5	
MATH 254	Calculus and Analytic Geometry IV	5	
MATH 255	Differential Equations and Their Applications	5	
PHYS 131	Introductory Physics: Particles and Motion	5	
PHYS 132	Introductory Physics: Electricity and Magnetism	5	
PHYS 133	Introductory Physics: Thermal Physics, Waves and Quantum Physics	5	
CHEM 121	General Chemistry	5	
STATS 245	Introduction to Statistical Analysis	5	
Core Requirements. (43 hours)			
AS 230 OR Geog 520	Basic Meteorology OR Climatology	5	
AS/Geog 620	Synoptic Meteorology Laboratory	3	
Geog 622.01	Boundary Layer Climatology	5	
Geog 622.02	Microclimatological Measurements	5	
Geog 623.01	Synoptic Analysis and Forecasting	5	
Geog 623.02	Severe Storm Forecasting	5	
AS 631	Atmospheric Thermodynamics	5	
AS 637	Dynamic Meteorology I	5	
AS 638	Dynamic Meteorology II	5	
Major Electives (Choose two courses from the list below; 8-10 hours)			
AS 629	Climate System Modeling: Basics and Applications	5	
Geog 410 (H) OR 420	Global Climate and Environmental Change OR Global Climate Change: Causes and Consequences	5	
Geog 597.02	Integrated earth Systems: Confronting Global Change	5	
Geog 607	Fundamentals of Geographic Information Systems	5	
Geog 684	Geographic Applications of Remote Sensing	5	
ES 206	ES Principles of Oceanography	5	
CE 603	CE Remote Sensing	4	
CE 613	CE Principles of Applied Hydrology	4	
	Total Program Hours		
	Minimum Program Hours (including prereqs)	**51-53**	
	Prerequisite Hours	**50**	
Advisor Signature and Date:			
Name:			
Major/Specialization:			
Campus ID:			

Undergrad AS Semester Proposal

SAMPLE FOUR YEAR PLAN

Atmospheric Sciences (BS)

Sample four-year plan (with all major courses in last 2 years)

"Free electives" can be used for research, internships, minors, 2nd majors

	Fall	Hrs.	Spring	Hrs.	Total hrs.
Year 1	Math 1151	5	Math 1152	5	
	Physics 1250	5	Physics 1251	5	
	Chem 1210	5	GE (language)	4	
			STAT 2450	3	
Total hrs		15		17	32
Year 2	Math 2153	4	Math 2255	3	
	GE (language)	4	GE (language)	4	
	GE (Bio w/ lab)	4	GE	3	
	GE	3	GE	3	
			GE	3	
Total hrs		15		16	31
Year 3	AS 2940	3	GEOG 5921	3	
	AS 5950	3	GEOG 5940	2	
	GE	3	AS 5951	3	
	GE	3	GEOG/AS elective	3	
	GE	3	GE	3	
Total hrs		15		14	29
Year 4	GEOG 5922	3	GEOG 5942	3	
	GEOG 5941	3	GEOG/AS elective	3	
	AS 5952	3	Free elective	3	
	Free elective	3	Free elective	3	
	Free elective	3	Free elective	3	
Total hrs		15		15	30
TOTAL for BS					**122**

Transition policy

Students who began their degree under quarters will not be penalized as we move to semesters, either in terms of progress towards their degree or their expected date of graduation. We do not see the need for any bridge courses in Atmospheric Sciences.

Within the Atmospheric Sciences BS, there is one 4-semester sequence two 3-semester sequences. (Two of these sequences start with the same course). Even with these sequences it is quite feasible for students to complete all the major courses in their last two years, which provides a lot of flexibility for students to complete the major in 4 years (given that they certainly can start earlier than their junior year). However, we do recognize that these sequences could present problems to students who would be graduating in the 2012-2013 year. For these students:

- We are advising them to start all sequences during the 2011-2012 school year at the latest, so that they have at most 2 courses in each sequence left for the following year.
- Where necessary, we will allow students to take the first two courses in these sequences concurrently rather than sequentially, which would reduce the time to completion by one semester.

Appendix A: List of Geography and Atmospheric Science courses

Geography and Atmospheric Sciences courses (arranged by semester number)					
In the case of discrepancy between this list and courses proposed in PACER, PACER prevails					
Quarter number	**Semester number**	**Designation**	**Semester Course Title**	**Credit hours**	**Prereqs**
GEOGRAPHY					
120	1900		Introduction to Weather and Climate	4	
120H	1900	H	Introduction to Weather and Climate	4	honors
205	2100		Human Geography	3	
New	2193		Individual Studies in Geography	1-9	IP
294	2194		Group Studies in Geography	1-3	
294H	2194	H	Group Studies in Geography	1-3	honors
480	2200		Mapping Our World	3	
240	2400		Economic and Social Geography	3	
240H	2400	H	Economic and Social Geography	3	honors
455	2500		Cities and their Global Spaces	3	
200	2750		World Regional Geography	3	
200H	2750	H	World Regional Geography	3	honors
210	2800		Physical Geography and Environmental Issues	3	
220	2960		Introduction to Physical Geography	4	
220H	2960	H	Introduction to Physical Geography	4	honors
445	3300		Transportation Security	3	
597.01	3597.01		World Urbanization	3	
597.02	3597.02		Integrated Earth Systems: Confronting Global Change	3	
597.03	3597.03		Environmental Citizenship	3	
460	3600		Space, Power and Political Geography	3	
460H	3600	H	Space, Power and Political Geography	3	honors
465	3601		Global Politics and the Modern Geopoltical Imagination	3	
450	3701		The Making of the Modern World	3	
470	3702		Life and Death Geographies: Global Population Dynamics	3	
400	3750		Geography of North America	3	
401	3751		Geography of Ohio	3	
505	3752		Geography of Latin America	3	

510	3753		Geography of the European Union	3	
512	3754		Geography of the Former Soviet Union	3	
430	3800		Geographical Perspectives on Environment and Society	3	
420	3900		Global Climate Change: Causes and Consequences	3	
410H	3901	H	Global Climate and Environmental Change	3	honors
490	3980		Biogeography: An Introduction to Life on Earth	3	
600	4100		Geographic Inquiry	3	
695	4101		Undergraduate Research and Professionalization Seminar	3	12 Geog hours
693	4193		Individual Studies in Geography	1-9	IP
New	4194		Group Studies in Geography	1-3	
New	4998		Undergraduate Research in Geography	1-9	IP
New	4998	H	Undergraduate Research in Geography	1-9	IP
783	4999		Thesis Research	1-9	Honors; IP
783H	4999	H	Thesis Research	1-9	Honors; IP
683	5100		Quantitative Geographical Methods	3	quarter version or semester success or to Stats 145
689	5191		Internship In Geography	1-6	12 hours in Major Program and IP
New	5193		Individual Studies in Geography	1-9	IP
694	5194		Group Studies in Geography	1-3	IP
580	5200		Elements of Cartography	3	
580S	5200	S	Elements of Cartography (Service)	3	
680	5201		Computer Cartography and Geographical Visualization	3	580 or 580S or 5200 or 5200S
607	5220		Fundamentals of Geographic Information Systems	3	
685	5221		Spatial Simulation and Modeling in GIS	3	607 or 5220

686	5222		GIS Applications in Social Science and Business	3	607 or 5220
687	5223		Design and Implementation of GIS	3	607 or 5220
688	5224		Emerging Topics in GIS	3	685 or 686 or 687 or 5221 or 5222 or 5223
684	5270		Geographic Applications in Remote Sensing	3	quarter version or semester success or to Stats 245
647	5275		Locational Analysis	3	
645	5300		Geography of Transportation	3	
640	5401		Economies, Space and Society	3	
655	5402		Land Use Geography	3	
650	5501		Urban Spaces in the Global Economy	3	
652	5502		Social Cities	3	
643	5601		Geographies of Governmentalities	3	
660	5602		Urban Political Geography	3	
642	5700		Geography of Development	3	
605	5751		New Worlds of Latin America	3	
608	5752		South Africa: Society and Space	3	
697	5797		Study at a Foreign Institution	1-9	IP
630	5801		Environmental Conservation	3	
635	5802		Globalization and Environment	3	
520	5900		Climatology	3	
622.01	5921		Microclimatology: Boundary Layer Climatology	3	Geog 520 or 5900 or AS 230 or 2940 or IP and Physics 132 or its success or
622.02	5922		Microclimatology: Microclimatological Measurements	3	622.01 or 5921

620	5940		Synoptic Meteorology Laboratory	2	Geog 520 or 5900 or AS 230 or 2940 or IP and Physics 132 or its success or
623.01	5941		Synoptic Meteorology: Synoptic Analysis and Forecasting	3	Geog 620 or 5940 or AS 620 or 5940
623.02	5942		Synoptic Meteorology: Severe Storm Forecasting	3	623.01 or 5941
787	6220		Advanced Applications in Geographic Information Systems	3	685 or 686 or 5221 or 5222, AND 687 or 5223
740	6271		Advanced Locational Analysis	3	647 or 5275 or IP
795	7101		Research Design	3	
800.01	7102		Fieldwork in Human Geography	3	
New	7193		Individual Studies in Geography	1-9	IP
New	7194		Group Studies in Geography	1-3	
882	8100		Development of Geographic Thought	3	
883.02	8102		Spatial Data Analysis	3	Intro to Stats or IP
899	8103		Interdepartmental Seminars	3	
983	8104		Special Topics in Quantitative Geography	3	883.01 or 883.02 or 8102
889	8109		Graduate Student Professionalization	3	
880	8200		Seminars in Cartography	3	
840.01	8271		Seminar in Location Analysis: Location Theory	3	
840.02	8272		Seminar in Location Analysis: Problems	3	
845	8300		Theory of Transportation Geography	3	

840.03	8400		Issues in Critical Human Geography	3	
870.01	8401		Seminar: Theory of Population and Social Geography	3	
870.02	8402		Seminar: Problems in Population and Social Geography	3	
850.01	8501		Seminar in Urban Geography: Spatial Organization of the City	3	
850.02	8502		Seminar in Urban Geography: Urban Systems Analysis	3	
850.03	8503		Seminar in Urban Geography: Third World Urbanization	3	
860.01	8601		Seminar: Theory of Political Geography	3	
860.02	8602		Seminar: Problems in Political Geography	3	
800.02	8800		Seminar in Environment and Society	3	
896	8896		Interdepartmental Seminar in Polar and Alpine Studies	3	IP
820.01	8901		Seminar: Problems in Climatology	3	
823	8902		Applied Climatology	3	623.01 or 5941or IP
822	8920		Microclimatology	3	620 or 622.01 or 5921 or 5940
821	8950		Dynamic Climatology	3	622.01 or 5921 or IP
820.03	8960		Seminar: Special Problems in Physical Geography	3	
998	8998		Thesis Research	1-9	
999	8999		Research in Geography: Dissertation	1-3	
ATMOSPHERIC SCIENCES					
New	2193		Individual Studies in Atmospheric Sciences	1-9	IP
New	2194		Group Studies in Atmospheric Sciences	1-3	IP
AS 230	2940		Basic Meteorology	3	Quarter version or semester successo

					r to Math 152 and Physics 132
New	4191		Internship in Atmospheric Sciences	1-6	12 hours in Major Program and IP
AS 693	4193		Individual Studies in Atmospheric Sciences	1-9	IP
New	4194		Group Studies in Atmospheric Sciences	1-3	IP
AS 699	4998		Undergraduate Research in Atmospheric Sciences	1-9	IP
AS 699	4998	H	Undergraduate Research in Atmospheric Sciences	1-9	IP
AS 783H	4999		Thesis Research	1-9	Honors; IP
AS 783	4999	H	Thesis Research	1-9	IP
AS 689	5191		Internship in Atmospheric Sciences	1-6	12 hours in Major Program and IP
New	5193		Individual Studies in Atmospheric Sciences	1-9	IP
AS 694	5194		Group Studies in Atmospheric Sciences	1-3	IP
New	5797		Study at a Foreign Institution	1-9	IP
AS 629	5901		Climate System Modeling: Basics and Applications	3	Credit for or concurrent enrollment in AS 230 or 2940 or Geog 520 or 5900 or IP
AS 620	5940		Synoptic Meteorology Laboratory	2	AS 230 or 2940 or Geog 520 or 5900
AS 631	5950		Atmospheric Thermodynamics	3	Quarter version or success or to

					Math 153
AS 637	5951		Dynamic Meteorology I	3	AS 631 or 5950 and quarter version or success or to Math 255 or 415
AS 638	5952		Dynamic Meteorology II	3	AS 637 or 5951 or quarter version or success or to Aero Eng 505
New	6191		Internship in Atmospheric Sciences	1-6	12 hours in Major Program and IP
New	7193		Individual Studies in Atmospheric Sciences	1-9	IP
New	7194		Group Studies in Atmospheric Sciences	1-3	IP
New	8191		Internship in Atmospheric Sciences	1-6	12 hours in Major Program and IP
AS 881	8900		Atmospheric Sciences Seminar	3	IP
AS 999	8999		Research in Atmospheric Sciences	3	

Credit hour explanation: Atmospheric Sciences BS

Program credit hour req.	A. Quarters	B. 2/3rds	C. Semesters	D. Change
Total minumum	51	34	32	2
In unit MINIMUM	43	28	26	2
In unit MAXIMUM	53	35	32	3
Outside unit MINIMUM	0	0	0	0
Outside unit MAXIMUM	9	6	6	0
Prerequsite MIN	50	33	38	5*
Prerequisite MAX	50	33	38	5*

* Increase in prerequisite hours is the result of how Math and Chemistry repackaged courses for semesters. Math requirement converts from 25 quarter hours to 20 semester hours; Chem requirement converts from 5 quarter hours to 5 semester hours

THE OHIO STATE UNIVERSITY

College of Arts and Sciences

4120 Smith Laboratory
174 W. 18th Avenue
Columbus, OH 43210

Phone (614) 292-6736
Fax (614) 292-5678
artsandsciences.osu.edu

April 6, 2011

To: W. Randy Smith, Vice Provost, Office of Academic Affairs
From: Terry L. Gustafson, Special Assistant to the Executive Dean for Semester Conversion
Re: Arts and Sciences Program Proposals from the Social and Behavioral Sciences Division

Arts and Sciences is pleased to submit the following programs from the Social and Behavioral Sciences Division to the Office of Academic Affairs for conversion from quarters to semesters. The programs have been approved by the faculty members and chair of the originating unit, and reviewed and approved by the divisional advisory panel, a subcommittee of the ASC Committee on Curriculum and Instruction (CCI), and the full CCI. The vote for approval of all programs at the full CCI was unanimous.

Program Name	Academic Plan Code	Conversion Designation	CCI Approval	Last Revision
Anthropology BA	ANTHROP-BA	Converted	3/4/2011	Prior to 2006
Anthropological Sciences BS	ANTHSCI-BS	Converted	3/4/2011	Prior to 2006
Anthropology Minor	ANTHROP-MN	Converted	3/4/2011	Prior to 2006
Economics BA	ECON-BA	Converted	2/22/2011	Prior to 2006
Economics BS	ECON-BS	Re-envisioned	2/22/2011	Prior to 2006
Economics Minor	ECON-MN	Converted	2/8/2011	10/22/08
Atmospheric Sciences BS	GEOG-BS	Converted	12/30/2010	1/20/10
Climate and Physical Geography BS	GEOG-BS	Converted	12/30/2010	1/20/10
Environment and Society BA	GEOG-BA	Converted	12/30/2010	1/20/10
Geographic Information Science BS	GEOG-BS	Converted	12/30/2010	1/20/10
Spatial Analysis BS	GEOG-BS	Converted	12/30/2010	1/20/10
Urban, Regional and Global Studies BA	GEOG-BA	Converted	12/30/2010	1/20/10
Geography Minor	GEOG-MN	Converted	12/30/2010	Prior to 2006
Campaign and Elections Minor	CAMPELE-MN	Converted	3/31/2011	6/20/07
Comparative Politics Minor	COMPPOL-MN	Converted	3/31/2011	6/20/07
Judicial Politics Minor	JUDPOL-MN	Converted	3/31/2011	6/20/07
Political Decision-Making Minor	POLDEC-MN	Converted	3/31/2011	6/20/07
Political Science Minor	POLSCI-MN	Converted	3/31/2011	6/20/07
Political Theory Minor	POLITTH-MN	Converted	3/31/2011	6/20/07
World Politics Minor	WRLDPOL-MN	Converted	3/31/2011	6/20/07
Psychology BA	PSYCH-BA	Re-envisioned	4/5/2011	2//20/08
Psychology BS	PSYCH-BS	Re-envisioned	4/5/2011	2/20/08
Biological Bases of Behavior Minor	BIOPSYC-MN	Converted	4/5/2011	10/7/09
Clinical and Individual Differences Minor	CLINPSY-MN	Converted	4/5/2011	10/7/09

Developmental Psychology Minor	DEVPSYC-MN	Converted	4/5/2011	10/7/09
General Psychology Minor	GENPSYC-MN	Converted	4/5/2011	10/7/09
Organization and Performance Minor	ORGPSYC-MN	Converted	4/5/2011	10/7/09
Psychology Research Minor	PSYRSCH-MN	Converted	4/5/2011	10/7/09
Social Psychology and Personality Minor	SOCPSYC-MN	Converted	4/5/2011	10/7/09

Arts and Sciences General Education (GE) Program: The GE program for untagged B.A. and B.S. degrees in Arts and Sciences was approved by the Council on Academic Affairs on May 26, 2010, after receiving approval from the Arts and Sciences Faculty Senate. All the programs presented here follow the approved GE program.

College of Arts and Sciences Transition Policy: The College of Arts and Sciences is committed to the principles outlined in the university's Pledge to Undergraduate Students. Each unit has a plan on how best to assist its majors and minors through the transition. And the Arts and Sciences Academic Advising Services will advise students on how to transition their GE program. Dual advising is the existing process used in Arts and Sciences and will continue under semesters.

Status: PENDING

PROGRAM REQUEST
Atmospheric Sciences

Last Updated: Gustafson,Terry Lee
04/06/2011

Fiscal Unit/Academic Org	Geography - D0733
Administering College/Academic Group	Social And Behavioral Sciences
Co-adminstering College/Academic Group	
Semester Conversion Designation	Converted with minimal changes to program goals and/or curricular requirements (e.g., sub-plan/specialization name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program, minimal or no changes in program goals or content)
Current Program/Plan Name	Geography
Proposed Program/Plan Name	Atmospheric Sciences
Program/Plan Code Abbreviation	GEOG-BS
Current Degree Title	Bachelor of Science

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		48	32.0	32	0.0
Required credit hours offered by the unit	Minimum	39	26.0	26	0.0
	Maximum	48	32.0	32	0.0
Required credit hours offered outside of the unit	Minimum	0	0.0	0	0.0
	Maximum	9	6.0	6	0.0
Required prerequisite credit hours not included above	Minimum	57	38.0	38	0.0
	Maximum	57	38.0	38	0.0

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

- Students acquire the theoretical basis for fundamental atmospheric processes and systems
- Students are familiar with computational and other forms of technology used in the atmospheric sciences
- Students can communicate atmospheric science concepts and methods orally, visually, or in writing
- Students can solve problems faced by atmospheric scientists.

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? Yes

Does the degree program or major have an assessment plan on file with the university Office of Academic Affairs? Yes

Summarize how the program's current quarter-based assessment practices will be modified, if necessary, to fit the semester calendar.

For our assessment, we use a variety of direct and indirect methods, none of which depend upon whether the program is run under quarters or semesters. As a result, we do not anticipate any changes to our assessment practices under the semester system.

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

- Attachment 3_Undergrad AS_110210.docx: Attachment 3

  (Curricular Map(s). Owner: Pernik,Juliana Christine)

- Division Cover Letter for Geography.doc: Attachment 1

  (Letter from the College to OAA. Owner: Mumy,Gene Elwood)

- Sciences CCI Chair--Cover Letter for Geography Majors.doc: CCI Subcommittee Chair letter

  (Other Supporting Documentation. Owner: Vankeerbergen,Bernadette Chantal)

- Attachment 2_Undergrad AS_121010.docx: Attachment 2

  (Program Proposal. Owner: Pernik,Juliana Christine)

- SBS Submission Memo.pdf: ASC Cover Letter

  (Letter from the College to OAA. Owner: Gustafson,Terry Lee)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Pernik,Juliana Christine	09/30/2010 02:40 PM	Submitted for Approval
Approved	Mansfield,Becky Kate	09/30/2010 03:21 PM	Unit Approval
Revision Requested	Mumy,Gene Elwood	10/14/2010 11:57 AM	College Approval
Submitted	Pernik,Juliana Christine	11/02/2010 11:20 AM	Submitted for Approval
Approved	Vanarsdale,Sonya Renee	11/02/2010 11:21 AM	Unit Approval
Approved	Vanarsdale,Sonya Renee	11/02/2010 11:22 AM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	11/12/2010 01:05 PM	ASCCAO Approval
Submitted	Pernik,Juliana Christine	11/15/2010 02:49 PM	Submitted for Approval
Approved	Mansfield,Becky Kate	11/15/2010 04:37 PM	Unit Approval
Approved	Mumy,Gene Elwood	11/15/2010 05:09 PM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	12/10/2010 01:58 PM	ASCCAO Approval
Submitted	Pernik,Juliana Christine	12/13/2010 03:46 PM	Submitted for Approval
Approved	Mansfield,Becky Kate	12/13/2010 03:58 PM	Unit Approval
Approved	Mumy,Gene Elwood	12/15/2010 08:14 AM	College Approval
Approved	Vankeerbergen,Bernadette Chantal	12/30/2010 07:56 PM	ASCCAO Approval
Approved	Gustafson,Terry Lee	04/06/2011 04:01 PM	ASC Approval
Pending Approval	Soave,Melissa A	04/06/2011 04:01 PM	CAA Approval

THE OHIO STATE UNIVERSITY

College of Arts and Sciences

186 University Hall
230 North Oval Mall
Columbus, OH 43210

Phone (614) 292-1667
Fax (614) 292-8666
Web artsandsciences.osu.edu

November 10,

Professor Larry Krissek
Chair, Arts and Sciences CCI

Dear Professor Krissek:

At the undergraduate level the Department of Geography has six major programs:

1. Environment and Society (BA)
2. Climatology and Physical Geography Specialization (BS)
3. Spatial Analysis (BS)
4. Urban, Regional and Global Studies (BA)
5. Geographic Information Science (BS) Tagged Major, pending
6. Atmospheric Science (BS) Tagged Major, pending

Atmospheric Science and Geographic Information Science are new degrees approved early this year at the University level but have not yet been given final approval by the Board of Regents. We are fairly confident that they will receive BOR approval and Geography has presented semester transition plans with only minor changes except for a reduction of sequences in the GIS major to eliminate possible transition programs in sequenced courses.

At the time the new degrees were being developed Geography also revised the entire Geography major and its specializations. These revisions were also approved by CAA early this year so the semester conversion plans contain minimal changes.

These conversion plans were reviewed by me and the Social Sciences Disciplinary Advisory Panel (SS DAP). The SS DAP and I support Geography's conversion plans and submit them to you for CCI's consideration.

Sincerely,

Gene E. Mumy

Gene E. Mumy
Associate Dean of Arts and Sciences/Social and Behavioral Sciences

Undergrad AS Semester Proposal – Attachment 2

To: OAA
Date: 6/14/2010

Cover Letter for Proposals from the Department of Geography

This is the transmittal cover letter to the Office of Academic Affairs that reflects the efforts by the Department of Geography under Quarter to Semester Conversion.

The department used a series of committee and special purpose task forces to review programs and courses. Having recently proposed substantial revisions to our majors, we were in relatively good position to begin the Q to S process.

There has been a tremendous effort to accomplish these planned changes, with commendable input from Professor Becky Mansfield (Undergraduate), Jay Hobgood (Atmospheric Science), and Darla Munroe (Graduate). The graduate level documents are still being finalized.

The department recommends approval of these changes, which by and large are converted with minimal changes to program goals and/or curricular requirements at the undergraduate level. A recently approved set of revisions to the Majors has been incorporated into our planned semester version. *[There are minimal name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program, minimal or no changes in program goals or content.]*

The graduate courses are minimally changed, but there is expected to be a complete re-write of our graduate manual to organize these classes in a way that conveys greater advisor flexibility. The department will seek appropriate approval for any substantive track or programs changes built around our existing graduate courses.

The following are the programs in the department:

a. Undergraduate bachelors degree programs and/or majors

1. Environment and Society (BA)
2. Climatology and Physical Geography Specialization (BS)
3. Spatial Analysis (BS)
4. Urban, Regional and Global Studies (BA)
5. Geographic Information Science (BS) Tagged Major, pending
6. Atmospheric Science (BS) Tagged Major, pending

b. Undergraduate minors
A minor in geography is available to any Arts and Sciences student who is not already majoring in geography.

Undergrad AS Semester Proposal – Attachment 2

c. Undergraduate associate degree programs
n/a

d. Graduate degree programs

1. M.A. in Geography
2. Ph.D. in Geography
3. M.S. in Atmospheric Science
4. Ph.D. in Atmospheric Science

e. Graduate minors
n/a

f. Graduate certificate programs
n/a

g. Graduate interdisciplinary specializations

Graduate Interdisciplinary Specialization in Geo-Spatial Data Analysis.

Since the interdisciplinary specialization requires elements from many other degree programs, we plan to finalize these syllabi and arrangements after the initial round of graduate degree courses has been screened.

h. Professional degree programs
n/a

i. Combined programs (e.g., BS/MS, Ph.D./ MD)
n/a

For the record, no programs are being withdrawn. The details in the balance of the template are incorporated by reference, and are being revised to ensure technical compliance with the templates.

Thank you for attention to these proposals

Morton O'Kelly
Professor & Chair
Department of Geography

Program Rationale Statement

This is a new major, in its last stages of approval (Board of Regents approval expected in the 2010-2011 Academic Year). Because it has not yet been approved and implemented, we made minimal changes. The current program proposals were developed by the Undergraduate Studies Committee with consultation with faculty. A consensus was achieved through discussion via email and at faculty meetings. The only change for semesters is that one course has been added to the list of electives.

List of semester courses in the program

Segment of Program	Semester #	Semester course name	Units
Required Prerequisites			
	Math 1251	Calculus and Analytic Geometry I	5
	Math 1252	Calculus and Analytic Geometry II	5
	Math 2253	Calculus and Analytic Geometry III	5
	Math 2455	Differential Equations and Their Applications	5
	Physics 1250	Introductory Physics: Particles and Motion	5
	Physics 1251	Introductory Physics: Electricity and Magnetism	5
	Chemistry 1XXX	General Chemistry	5
	Statistics 2450	Introduction to Statistical Analysis	3
Core Requirements. (26 hours)			
	AS 2940 OR GEOG 5900	Basic Meteorology OR Climatolotgy	3
	AS/GEOG 5940	Synoptic Meteorology Laboratory	2
	5921	Boundary Layer Climatology	3
	5922	Microclimatological Measurements	3
	5941	Synoptic Analysis and Forecasting	3
	5942	Severe Storm Forecasting	3
	AS 5950	Atmospheric Thermodynamics	3
	AS 5951	Dynamic Meteorology I	3
	AS 5952	Dynamic Meteorology II	3
Major Electives (Choose two courses from the list below; 6 hours)			
	AS 5901	Climate System Modeling: Basics and Applications	3
	3901H OR 3900	Global Climate and Environmental Change OR Global Climate Change: Causes and Consequences	3
	3882	Integrated Earth Systems: Confronting Global Change	3
	5200	Elements of Cartography	3
	5220	Fundamentals of Geographic Information Systems	3
	5270	Geographic Applications of Remote Sensing	3
Successor to	ES	Principles of Oceanography	3
	CIVILEN 5130	Applied Hydrology	3
	CIVILEN 5420	Remote Sensing of the Environment	3

Undergrad AS Semester Proposal – Attachment 2

Semester Advising Sheet

Atmospheric Science BS Advising Sheet SEMESTERS			
Segment of Major Program and Course Number	**Course name**	**Credit hours**	**Grade**
Required Prerequisites or Supplements to the Major			
Math 1251	Calculus and Analytic Geometry I	5	
Math 1252	Calculus and Analytic Geometry II	5	
Math 2253	Calculus and Analytic Geometry III	5	
Math 2455	Differential Equations and Their Applications	5	
Physics 1250	Introductory Physics: Particles and Motion	5	
Physics 1251	Introductory Physics: Electricity and Magnetism	5	
Chemistry 1XXX	General Chemistry	5	
Statistics 2450	Introduction to Statistical Analysis	3	
Core Requirements. (26 hours)			
AS 2940 OR GEOG 5900	Basic Meteorology OR Climatolotgy	3	
GEOG 5921	Boundary Layer Climatology	3	
GEOG 5922	Microclimatological Measurements	3	
AS/GEOG 5940	Synoptic Meteorology Laboratory	2	
GEOG 5941	Synoptic Analysis and Forecasting	3	
GEOG 5942	Severe Storm Forecasting	3	
AS 5950	Atmospheric Thermodynamics	3	
AS 5951	Dynamic Meteorology I	3	
AS 5952	Dynamic Meteorology II	3	
Major Electives (Choose two courses from the list below; 6 hours)			
AS 5901	Climate System Modeling: Basics and Applications	3	
GEOG 4901H OR 4900	Global Climate and Environmental Change OR Global Climate Change: Causes and Consequences	3	
GEOG 3882	Integrated Earth Systems: Confronting Global Change	3	
GEOG 5200	Elements of Cartography	3	
GEOG 5220	Fundamentals of Geographic Information Systems	3	
GEOG 5270	Geographic Applications of Remote Sensing	3	
Successor to ES	Principles of Oceanography	3	
CIVILEN 5130	Applied Hydrology	3	
CIVILEN 5420	Remote Sensing of the Environment	3	
	Total Program Hours		
	Minimum Program Hours	32	
	Prerequisite Hours	38	
Advisor Signature and Date:			
Name:			
Major/Specialization:			
Campus ID:			

Undergrad AS Semester Proposal – Attachment 2

Quarter Advising Sheet

Atmospheric Science BS Advising Sheet QUARTERS			
Segment of Major Program and Course Number	**Quarter course name**	**Credit hours**	**Grade**
Required Prerequisites or Supplements to the Major			
MATH 151	Calculus and Analytic Geometry I	5	
MATH 152	Calculus and Analytic Geometry II	5	
MATH 153	Calculus and Analytic Geometry III	5	
MATH 254	Calculus and Analytic Geometry IV	5	
MATH 255	Differential Equations and Their Applications	5	
PHYS 131	Introductory Physics: Particles and Motion	5	
PHYS 132	Introductory Physics: Electricity and Magnetism	5	
PHYS 133	Introductory Physics: Thermal Physics, Waves and Quantum Physics	5	
CHEM 121	General Chemistry	5	
STATS 245	Introduction to Statistical Analysis	5	
Core Requirements. (43 hours)			
AS 230 OR Geog 520	Basic Meteorology OR Climatology	5	
AS/Geog 620	Synoptic Meteorology Laboratory	3	
Geog 622.01	Boundary Layer Climatology	5	
Geog 622.02	Microclimatological Measurements	5	
Geog 623.01	Synoptic Analysis and Forecasting	5	
Geog 623.02	Severe Storm Forecasting	5	
AS 631	Atmospheric Thermodynamics	5	
AS 637	Dynamic Meteorology I	5	
AS 638	Dynamic Meteorology II	5	
Major Electives (Choose two courses from the list below; 8-10 hours)			
AS 629	Climate System Modeling: Basics and Applications	5	
Geog 410 (H) OR 420	Global Climate and Environmental Change OR Global Climate Change: Causes and Consequences	5	
Geog 597.02	Integrated earth Systems: Confronting Global Change	5	
Geog 607	Fundamentals of Geographic Information Systems	5	
Geog 684	Geographic Applications of Remote Sensing	5	
ES 206	ES Principles of Oceanography	5	
CE 603	CE Remote Sensing	4	
CE 613	CE Principles of Applied Hydrology	4	
	Total Program Hours		
	Minimum Program Hours (including prereqs)	**51-53**	
	Prerequisite Hours	**50**	
Advisor Signature and Date:			
Name:			
Major/Specialization:			
Campus ID:			

Transition policy

Students who began their degree under quarters will not be penalized as we move to semesters, either in terms of progress towards their degree or their expected date of graduation. The sequence of classes in the major is largely very flexible. We do not see the need for any bridge courses in Atmospheric Sciences.

Curriculum map, indicating how program goals are accomplished via specific courses

KEY:	1=Beg.	2=Int.	3=Adv.	
	Learning outcome A	**Learning outcome B**	**Learning outcome C**	**Learning outcome D**
Prerequisites; Successors to:				
Math 1251				1
Math 1252				1
Math 2253				1
Math 2455				2
Physics 1250	1	1		
Physics 1251	1	1		
Chem 1 (1XXX)	1	1		
Stats 2450				1
Required core:				
AS 2940 OR GEOG 5900	1	1	1,2	1
AS/GEOG 5940	1	2	2	2
5921	3		2	
5922		3	3	3
5941	3	2	3	2
5942	3	2	3	3
AS 5950	2	2	2	2
AS 5951	3	2	2	2
AS 5952	3	2	2	3
Electives:				
AS 5901	2	3	2	
3901H OR 3900	2		3	
3882	1	2	1	
5200	1	1	2	1
5220	1	1		
5270	2	2		2
ES: Oceanography	1		1	
CIVILEN 5130	3	3		3
CIVILEN 5420	2	3		2

Learning Outcome A: Students acquire the theoretical basis for fundamental atmospheric processes and systems

Learning Outcome B: Students are familiar with computational and other forms of technology used in the atmospheric sciences.

Learning Outcome C: Students can communicate atmospheric science concepts and methods orally, visually, or in writing

Learning Outcome D: Students can solve problems faced by atmospheric scientists.

THE OHIO STATE UNIVERSITY

College of Arts and Sciences

186 University Hall
230 North Oval Mall
Columbus, OH 43210

Phone (614) 292-1667
Fax (614) 292-8666
Web artsandsciences.osu.edu

November 23, 2010

Professor Larry Krissek
Chair, Arts and Sciences CCI
Re: Geography Majors

Dear Professor Krissek:

At the CCI's Sciences Subcommittee meeting of November 10, 2010 the semester conversion plans for the following six majors provided by the Department of Geography were reviewed:

1. Environment and Society (BA); 2. Climatology and Physical Geography Specialization (BS); 3. Spatial Analysis (BS); 4. Urban, Regional and Global Studies (BA); 5. Geographic Information Science (BS) Tagged Major, pending; 6. Atmospheric Science (BS) Tagged Major, pending.

The first four majors were in place when Geography decided to propose new Atmospheric Sciences and Geographic Information Science majors. To align the existing majors with the two new ones and to prevent overlap, the Department also substantially revised its four existing majors. The new majors and the revisions were all approved by CAA in January 2010. As a result there was no need to rethink the structure of any major for calendar conversion and all conversions are with minimal changes.

Actually about the only minimal change was to eliminate a sequence in the core courses of the GIS major to avoid transition problems and the need for bridge courses. Other than that all of the conversions are very direct. As a result the committee voted on November 10 to approve the Atmospheric Sciences (unanimously approved) and Geography Environment and Society BA. After receiving clarification on some minor points the committee approved the other four majors in an electronic ballot.

It is my pleasure to now submit these majors to you for the next step in the approval process.

Sincerely,

Gene E. Mumy

Gene E. Mumy
Acting Subcommittee Chair for Nov. 10
Associate Dean of Arts and Sciences/Social and Behavioral Sciences