

*Proposed Curriculum Revisions in the
Atmospheric Science B.S. and Environmental Science B.S.*

Department of Atmospheric and Environmental Sciences
December 16, 2011

Proposed changes to the Atmospheric Science B.S.

The Atmospheric Science B.S. curriculum is designed such that students take each course in a prescribed sequence. Currently, the students take the dynamics "core" (ATM 410 and 411) during their senior year, along with the electives Synoptic Meteorology I and II (ATM 400 and 401, respectively), which are taken by a large majority of ATM B.S. students. After reviewing feedback from ATM B.S. graduates, and after several in-depth meetings among DAES faculty about the pros and cons of the current curriculum, we have decided that the dynamics core should be moved up one full year, thus beginning during the fall semester of a student's junior year. The benefits of this proposed curriculum change are as follows:

- 1) With the dynamics core moved up one semester, students will already have a solid foundation in the major with which to build upon when they take elective courses such as Synoptic Meteorology I and II (ATM 400 and 401), Tropical Meteorology (ATM 421), and Climate Variability and Change (ATM 306). Currently, some dynamics is taught in these courses in order to make up for material that students haven't yet learned, and moving the dynamics sequence up one full year will allow new, relevant material to be taught in the aforementioned courses.
- 2) There is currently a one-semester gap between ATM 315 and the current dynamics core (ATM 410 and 411). As it is currently taught, ATM 315 covers introductory dynamics and quantitative methods, but with the lengthy gap between this course and Dynamics I (ATM 410) in the current curriculum, material that was covered in ATM 315 needs to be covered again, since many students have forgotten some of the core concepts covered in ATM 315.
- 3) The change allows a third course in the dynamics sequence to be offered (ATM 418) during a student's senior year, which will cover mesoscale dynamics, material that hasn't been offered at the undergraduate level at Albany before but is covered in other universities' atmospheric science programs. A detailed syllabus for the proposed course is presented within this document.

It is proposed that ATM 315 be revised and re-named Environmental Statistics, an elective for the Atmospheric Science B.S., and required for the Environmental Science B.S. core (see the narrative for the ENV B.S. in this document for details on the latter). Concepts covered in both majors require a certain amount of background knowledge in statistics and statistical research methods. Skills acquired in such a course would be highly valuable for students in rounding out their major, and preparing them for careers or graduate work in either field. A syllabus for the revised course is included in this document.

With the addition of new faculty to the department in the Fall 2012 semester, we would also like to offer a "special topics" course for undergraduates in both atmospheric and environmental sciences. This gives the department some flexibility in course offerings for our new faculty. In addition, the department occasionally has visiting faculty, and special topics courses allow us to offer electives for undergraduates taught by visiting

specialists in the field.

Finally, it is proposed that ATM 350 become a two-credit co-taught course. A second period devoted to lab time to work on assigned coursework under the guidance of the instructors will be introduced. In addition, a final presentation using the tools learned in the course will be required. This will add one credit to the Atmospheric Science B.S., bringing it to 66 total credits.

Summary of Atmospheric Science B.S. Changes

<u>Current Curriculum</u>	<u>Proposed Changes</u>
A MAT 111/112/118, 113, 214, 311	“ ”
A PHY 140, 145, 150, 240	“ ”
A CHM 120	“ ”
A ATM 209	“ ”
A ATM 210/210Z	“ ”
A ATM 211	“ ”
A ATM 315	Revised course; see syllabus
A ATM 320	“ ”
A ATM 321	A ATM 425 (same course, taken senior year)
A ATM 350	Now two credits (two days per week)
A ATM 410, 411 (Dynamics)	A ATM 316, 317, 418 (begins jr. year, three courses)
12 upper-level electives	“ ”

Atmospheric Science B.S. MAP with proposed curriculum revisions ****ONLY required courses are listed****

Fall 1

A MAT 112
A PHY 140, 145
A CHM 120

Spring 1

A MAT 113
A PHY 150

Fall 2

A MAT 214
A PHY 240
A ATM 209
A ATM 210/Z

Spring 2

A MAT 311
A ATM 211

Fall 3

A ATM 316

Spring 3

A ATM 317
A ATM 320
A ATM 350

Fall 4

A ATM 418

Spring 4

A ATM 425

Total credits in the major = 66

Proposed changes to the Environmental Science B.S.

The Environmental Sciences B.S. curriculum consists of a core program required of all ENV students and four different concentrations: Climate, Geography, Biology and Geology. With the retirement and departure of our remaining Geology professors, Linsley, Kidd and Delano, we have no faculty member left in our department with expertise in Classical Geology. We therefore have no other choice than to close out the Geology concentration and eliminate all remaining Geology courses from the Undergraduate Bulletin, except for some cross-listed courses (GEO/ENV) and one introductory course (AGEO 221) which will remain a required course for all ENV majors and which will be taught by instructional support specialist and geochemist Steve Howe. Note that this reduces the required credits in our major from 66 to 65 credits.

The second proposed change includes the revision of AATM 315 (Environmental Statistics), taught by Prof. Roundy, which would replace AENV 105 (Introduction to Environmental Science) in the core curriculum. We feel that our ENV students do not receive sufficient training in the statistical analysis of environmental data, required in today's job market. AENV105 on the other hand was a course that was offered at the Gen-Ed level and our students often complained that it was overcrowded with students who showed a lack of interest and was based on repetitive material that they were exposed to in other courses as well. We feel that this substitution will increase the rigor of our ENV B.S. degree program.

The third proposed change concerns the climate concentration where with the addition of a new faculty member, Prof. Zhou, we have attained new expertise in the area of Hydrology and Remote Sensing. This allows us to reintroduce a Hydrology course (AATM 301 – Surface Hydrology and Hydrometeorology) as a required course in the climate concentration. This is an already existing course, but it was never taught after the departure of Prof. Mohr and is currently listed only as an elective in the Climate concentration. This course will replace AGOG 304 (Climatology), which will remain an elective in the climate concentration.

The fourth change concerns the ENV Biology concentration. We had a meeting with some of our colleagues from Biology on November 21, in which we discussed the availability and usefulness of Biology courses currently listed as required or elective courses for our ENV students with a Biology concentration. Based on this discussion we propose to replace ABIO 230 (People and Resources in Ecological Perspective), which will likely not be taught much longer, by A BIO 212Y (Genetics). ABIO 212Y is a prerequisite for almost all upper level BIO courses and our students therefore had to take this course regardless in the past. Not listing this course as required was an oversight on our part which we now rectify. In addition we also include ABIO 320 (Ecology) as a required course. On the other hand we have relaxed the requirements for the electives, by allowing our students to fulfill the remaining 9 elective credits from any BIO course that is equal to BIO 218 or higher.

Summary of Environmental Sciences B.S. Changes

CORE

Current Curriculum

A MAT 111/112/118/, 113/119

A PHY 140/141, 150/151/202

A CHM 120/130, 121/131

A BIO 120

A ENV 105

A ENV 201

A ATM 210

A GEO 221

A ENV 250

A ENV 327

A ENV 490

Proposed Changes

“ ”

“ ”

“ ”

“ ”

Replaced by new course, A ATM 315

“ ”

“ ”

New description, reduced to 3 credits

“ ”

“ ”

“ ”

CLIMATE CONCENTRATION

Current Curriculum

Required courses:

A GOG 304

A ATM 306

A ENV 450

Proposed Changes

Replaced by A ATM 301

“ ”

“ ”

Electives

(“at least 3 credits from following list”)

A ATM 301

A ATM 304, 307, 335, 414

ENV/GEO 435

A MAT 308

Replaced by A GOG 304

“ ”

Replaced by A ENV/GEO 350

“ ”

(“at least 12 elective credits must be taken from the combination of the previous elective list and”):

A CHM 220, 221

A ENV 496,

A MAT 214, 311,

A PHY 150 OR 151 OR T PHY 151,

APHY 202,

APHY240,

I CSI 201

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

“ ”

GEOLOGY CONCENTRATION

We have previously submitted a request to governance to end admission to this concentration as of Spring 2012. This concentration will be closed. This requires eliminating, without substitution, the following courses from the Bulletin, as they will not be offered, regardless;

A ENV/GEO 435 (Geohydrology)

A GEO 223 (Introductory Field Geology)
A GEO 330 (Structural Geology)
A GEO 331 (Field excursions in Structural Geology)
A GEO 332 (Structural Geology Laboratory)
A ENV/GEO 466 (Marine and Estuary Systems)
A GEO 470 (Tectonics)

BIOLOGY CONCENTRATION

Current Curriculum

Required courses:

A BIO 121

A BIO 122

A BIO 123Z

ABIO 230

“”

Proposed Changes

“”

“”

“”

“Replaced by A BIO 212Y”

“Adding new required course ABIO 320”

Electives

new: “at least 9 credits from any BIO course equal to BIO 218 or higher”)

GEOGRPAHY CONCENTRATION

No changes

New/Revised Course Syllabi

ATM/ENV 315

Environmental Statistics, Catalog#xxxxx Fall 2012

Professor: Dr. Paul E. Roundy ES339A 442-4476
Office hour 1:30-2:30 p.m. Tuesday or by appointment
roundy@atmos.albany.edu

Graduate Student Assistant: To be announced
Meeting Time: TH AM?. Classroom TBA

Students must purchase the student version of MATLAB, as the in-class and project exercises will be prosecuted via this software (no additional toolboxes are required). Pre-reqs: ATM210; MAT113. Recommended Course: MAT220.

GRADING: Class Exams (2), 30% each. Participation and quizzes, 40%. Participation includes brief project reports in which the students explain what they did and interpret the results physically. Some assignments may be distributed by e-mail.

90-93 A-, 94-100 A, 80-83 B-, 83-87 B, 87-89 B+, etc.

Improvement greater than 15% from the first exam to the last yields 3% added to final grade.

PURPOSE: This course is designed to prepare students from various backgrounds to succeed in applying statistical methods for operational and research activities with a particular emphasis on *physical interpretation* of the results.

The class will include a brief introduction to MATLAB. Course content also will include:

1. Characterization and interpretation of atmospheric and environmental data sets, going beyond the basics of mean, median, range, standard deviation, variance, etc.
2. Spatial statistics of environmental data (correlation, autocorrelation, scaling, sampling)
3. Hypothesis testing
4. Understanding and communicating forecast probabilities for Weather or Climate events
5. Basic vector and matrix methods for discrete environmental data and a simple empirical orthogonal function (EOF) analysis
6. Statistical modeling and forecasting of environmental data (e.g., representing Mona Loa CO₂, MOS (Model Output Statistics) temperature forecasting, SHIPS hurricane intensity forecasting) and assessing forecast skill
7. Basic power spectrum analysis

and related topics, developed in the context of *real* atmospheric/environmental datasets and associated problems.

ATM 418: Dynamic Meteorology III

Fall Semester 2011 (3 credits), Class Number ?????

Lecture: Tuesday & Thursday 8:45-10:05 in ES 232

<http://www.atmos.albany.edu/daes/atmclasses/...>

Instructor:

Professor Ryan Torn

Office: ES 229

Phone: 442.4560

Fax: 442.5825

torn@atmos.albany.edu

Office hours: Monday and Wednesday 11:00-12:00, and by appointment

Course Objective:

This course uses the governing equations of the atmosphere to understand mesoscale phenomena, including convection, flow over topography and boundary layer. In addition, students will learn how the governing equations are used to produce numerical weather model forecasts.

Prerequisites:

ATM 317, 320

Text:

An Introduction to Dynamic Meteorology by J. R. Holton

Supplementary reading:

Mid-Latitude Atmospheric Dynamics: A First Course, by J. E. Martin

Cloud Dynamics, by R. A. Houze

Course Requirements:

7 Homework assignments and Summary: 30%

2 In-class exams: 20% each

Final exam: 30%

Grading: A-E

Each student will be assigned a group that will be responsible for giving a summary of the previous lecture on a regular basis. At the end of the course, each group is assigned a grade based on the quality of the summary, with adjustments based on peer assessment. Late Homework and off-time exams are only allowed for University-recognized reasons.

Course Outline:

1. Topographic flow (2 weeks; course notes)

- flow around topography
- downslope winds
- topographic kelvin waves

2. Dynamics of Convection (4 Weeks; course notes)

- buoyancy and entrainment
- squall lines and RKW theory
- supercell dynamics
- sea breezes and dry lines

3. Boundary Layer (3 Weeks)

- mean and perturbation form of equations (Holton 5.1)
- turbulent kinetic energy (Holton 5.2)
- introduction to K methods (Holton 5.3)
- Ekman solution and spin-down (Holton 5.3)

4. Numerical Weather Prediction (3 weeks; course notes)

- finite differencing
- time stepping algorithms
- spectral techniques
- microphysics, cumulus, boundary layer parameterizations
- data assimilation and ensemble forecasting

Interdepartmental Support Letter

A ATM 315

Date: Thu, 27 Oct 2011 16:20:49 +0000
From: "Plotnick, Steven" <splotnick@albany.edu>
To: Paul E. Roundy <roundy@atmos.albany.edu>
Cc: "Zhu, Kehe" <kzhu@albany.edu>, "Newman, Stacy A" <snewman@albany.edu>
Subject: RE: environmental statistics course

Dear Prof. Roundy,

This note is to express our department's support for your proposed course in Environmental Statistics. Certainly, we are happy to see the use of linear algebra and statistics in analyzing real world data sets. (We fully expect that after your course has been taught for a few years, the TV weatherman will be much more reliable!)

We agree that your course should make only minor demands on our department's resources. Since you are not requiring linear algebra, we would expect only a few of your students to take that course each year, and some of them are already taking it as math minors. The same goes, only more so, for our applied statistics course, since it is a 400-level course, so we would expect only your best students to consider it.

Good luck with your new course.

Best,

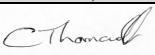
Steven Plotnick
Director of Undergraduate Studies
Department of Mathematics

Course Action Forms

Index

1. A ATM 301
2. A ATM 305
3. A ATM 211
4. A ATM 311
5. A ATM 315
6. A ATM 320
7. A ATM 321Y/A ATM 425Y (new)
8. A ATM 350
9. A ATM 400
10. A ATM 401
11. A ATM 409
12. A ATM 410/A ATM 316 (new)
13. A ATM 411/A ATM 317 (new)
14. A ATM 418
15. A ATM 421
16. A ATM 450
17. A ENV/GEO 435
18. A GEO 223/223Z
19. A GEO 330
20. A GEO 331
21. A GEO 332
22. A ENV/GEO 466
23. A GEO 470
24. A GOG 304
25. A ENV 105
26. A ATM 306
27. A ENV/ATM 327
28. A BIO 230
29. A BIO 212Y
30. A BIO 320
31. A GEO 221
32. A ATM 480
33. A ENV 480

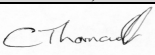
University at Albany – State University of New York			
College of Arts and Sciences	Course Action Form	Proposal No. <u>1</u>	
Please mark all that apply:			
<input type="checkbox"/> New Course	Revision of: <input type="checkbox"/> Number	<input type="checkbox"/> Description	
<input type="checkbox"/> Cross-Listing	<input type="checkbox"/> Title	<input checked="" type="checkbox"/> Prerequisites	
<input type="checkbox"/> Shared-Resources Course	<input type="checkbox"/> Credits		
<input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)	<input checked="" type="checkbox"/> Other (specify): Major Requirements		
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: A ATM 301 New: <u>-----</u> Credits: <u>3</u>			
Course Title: Surface Hydrology and Hydrometeorology			
Course Description to appear in Bulletin:			
<p>A survey of the water cycle and its interactions with the earth and atmosphere, including the processes of precipitation, evaporation, and stream flow. Water resources and policy issues incorporated where applicable. Counts as upper level credit for the Atmospheric Science B.S. degree.</p>			
Prerequisites statement to be appended to description in Bulletin:			
<p>Pre-requisite: ATM 210 or 210Z.</p>			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
<p>With the anticipated annual teaching of ATM 301 and inability to offer ATM 408 as frequently, ATM 301 will now count as an upper-level elective for Atmospheric Science majors. The rigor of the course material will match that of other currently taught upper-level ATM electives. The updated bulletin will now read that courses ATM 301 or above will count as upper-level ATM electives, <i>with the exception of ATM 304.</i></p> <p>In addition, we also propose to change ATM 301 from elective to required course in the Climate concentration of the Environmental Science B.S.</p>			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Department(s) having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

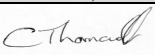
University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>2</u>	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input type="checkbox"/>
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input checked="" type="checkbox"/>
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits <input type="checkbox"/>
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): <u>Fall 2012</u>	
Course Number	Current: <u>A ATM 305</u>	New: <u>-----</u>	Credits: <u>3</u>
Course Title: <u>Global Physical Climatology</u>			
Course Description to appear in Bulletin:			
<p>Same as at present.</p>			
Prerequisites statement to be appended to description in Bulletin:			
<p>Co-requisites: A ATM 316, A ATM 315 or permission of instructor.</p>			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
<p>Due to changes in the dynamics “core” (see curriculum revision narrative), the new appropriate co-requisite for ATM 305 is ATM 316: Dynamics I. This ensures that atmospheric science majors interested in taking ATM 305 already have a background in weather and forecasting and are at the very least taking Dynamics I concurrent with ATM 305.</p> <p>A ATM 315 is added as a co-requisite due to the amount of statistics in the ATM 305 syllabus.</p>			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>3</u>	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input checked="" type="checkbox"/> Description
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input type="checkbox"/> Prerequisites
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): <u>Fall 2012</u>	
Course Number Current: <u>A ATM 211</u> New: <u>-----</u> Credits: <u>4</u>			
Course Title: <u>Weather Analysis and Forecasting</u>			
Course Description to appear in Bulletin:			
<p>An introduction to the use and interpretation of observed weather data, satellite and radar imagery, and atmospheric soundings; horizontal atmospheric forces and force balances; airmasses and fronts; extratropical cyclone development and structure; mid-latitude flow properties; temperature and precipitation forecasting. Offered Spring semester only.</p>			
Prerequisites statement to be appended to description in Bulletin:			
<p>Same as at present</p>			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
<p>Minor update to course description</p>			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

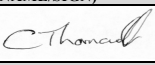
University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>4</u>	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input checked="" type="checkbox"/> Description
<input type="checkbox"/>	Cross-Listing	<input checked="" type="checkbox"/>	Title <input type="checkbox"/> Prerequisites
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: A ATM 311	New: <u>-----</u>	Credits: <u>4</u>
Course Title: Severe and Hazardous Weather and Forecasting			
Course Description to appear in Bulletin:			
Continuation of ATM 211. Analysis and forecasting of various types and scales of severe weather, including tropical cyclones, thunderstorms and thunderstorm complexes, tornadoes, hail, lightning, lake-effect precipitation, blizzards, and ice storms. Once per week, students lead current and forecast weather discussions. Offered Fall semester only.			
Prerequisites statement to be appended to description in Bulletin:			
Same as at present			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Minor update to course description and title			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>5</u>	
Please mark all that apply:			
<input type="checkbox"/> New Course <input type="checkbox"/> Cross-Listing <input type="checkbox"/> Shared-Resources Course <input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)	Revision of: <input type="checkbox"/> Number <input checked="" type="checkbox"/> Title <input type="checkbox"/> Credits <input type="checkbox"/> Other (specify): _____	<input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisites	
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A ATM 315</u> New: <u>-----</u> Credits: <u>3</u>			
Course Title: <u>Environmental Statistics</u>			
Course Description to appear in Bulletin:			
Application of statistical methods to physical interpretation of signals in atmospheric and environmental datasets. Basic characterization of datasets, hypothesis testing, spatial statistics, assessment of forecast skill, and other topics to help analyze, understand, and communicate with others about the physical processes behind the signals and their relevance to stakeholders.			
Prerequisites statement to be appended to description in Bulletin:			
ATM 210 or 210Z, A MAT 113 or 119 or T MAT 119. Recommended: MAT 220			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###):		<u>A ENV 315</u>	
This course is (will be) a shared-resources course with (i.e., CAS ###):		_____	
Explanation of proposal:			
The changes to A ATM 315 reflect a revised curriculum covering statistical methods in atmospheric and environmental sciences. Having our students learn such methods for their major is highly beneficial in research and other career paths in both fields. The course will now be an elective for the atmospheric science major, and required for the environmental science core. For additional explanation, please refer to the introductory narrative, course syllabus, and inter-departmental support letter, all embedded within this document.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
See support letter from the math department.			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

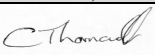
University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 6	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input type="checkbox"/>
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input checked="" type="checkbox"/> Description
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits <input checked="" type="checkbox"/> Prerequisites
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A ATM 320</u> New: <u>-----</u> Credits: <u>3</u>			
Course Title: <u>Atmospheric Thermodynamics</u>			
Course Description to appear in Bulletin:			
Same as at present			
Prerequisites statement to be appended to description in Bulletin:			
A PHY 240; A ATM 316			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Update to prerequisites to reflect changes to the ATM curriculum: 1) The dynamics core begins fall of junior year with ATM 316, which should be the semester before a student takes ATM 320; 2) ATM 321 will now be taken during a student's senior year, so it is removed as a co-requisite.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>7</u>	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input checked="" type="checkbox"/>	Number
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
		To be effective (semester/year): Fall 2012	
Department: <u>Atmos. and Environmental Sci.</u>			
Course Number Current: <u>A ATM 321Y</u> New: <u>A ATM 425Y</u> Credits: <u>4</u>			
Course Title: <u>Physical Meteorology</u>			
Course Description to appear in Bulletin:			
Same as at present			
Prerequisites statement to be appended to description in Bulletin:			
A ATM 316, 320 (the latter acceptable as a co-requisite)			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Update to prerequisites to reflect changes to the ATM curriculum: The dynamics core begins fall of junior year with ATM 316. The change in course number is to bring it to a 400+ level, since in the ATM MAP, it will now be suggested to be taken during the spring semester of a student's senior year.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)		Date	
Chris Thorncroft 		12-16-2011	
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Dean of College (PRINT NAME/SIGN)	
Date		Date	
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)	
Date		Date	

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 8	
Please mark all that apply:			
<input type="checkbox"/> New Course <input type="checkbox"/> Cross-Listing <input type="checkbox"/> Shared-Resources Course <input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)	Revision of:	<input type="checkbox"/> Number <input type="checkbox"/> Title <input checked="" type="checkbox"/> Credits <input type="checkbox"/> Other (specify): _____	<input type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisites
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A ATM 350</u> New: _____ Credits: <u>2</u>			
Course Title: <u>Meteorological Datasets and Numerical Computation</u>			
Course Description to appear in Bulletin:			
Same as at present			
Prerequisites statement to be appended to description in Bulletin:			
A ATM 211, 316			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Update to prerequisites to reflect changes to the ATM curriculum: 1) The dynamics core begins fall of junior year with ATM 316, as ATM 315 is now a statistics course. In addition, the course is now two credits, which brings the ATM B.S. major up to 66 credits.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
			Date
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)
			Date

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 9	
Please mark all that apply:			
<input type="checkbox"/> New Course	Revision of:	<input type="checkbox"/> Number	<input checked="" type="checkbox"/> Description
<input type="checkbox"/> Cross-Listing		<input type="checkbox"/> Title	<input checked="" type="checkbox"/> Prerequisites
<input type="checkbox"/> Shared-Resources Course		<input type="checkbox"/> Credits	
<input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)		<input type="checkbox"/> Other (specify):	
Department: Atmos. and Environmental Sci.		To be effective (semester/year): Fall 2012	
Course Number	Current: A ATM 400	New: _____	Credits: 3
Course Title: Synoptic Meteorology I			
Course Description to appear in Bulletin:			
<p>Investigation of multi-scale weather phenomena through application of fundamental thermodynamic and dynamic principles; exploration of the connections between observational and theoretical descriptions of atmospheric motions; use of operational weather prediction models and products for weather forecasting; scientific issues in weather forecasting. Two joint lecture-laboratory periods each week.</p>			
Prerequisites statement to be appended to description in Bulletin:			
Prerequisites: A ATM 311, 317, 350			
If S/U is to be designated as the only grading system in the course, check here:		<input type="checkbox"/>	
This course is (will be) cross listed with (i.e., CAS ###):		_____	
This course is (will be) a shared-resources course with (i.e., CAS ###):		_____	
Explanation of proposal:			
<p>Update to prerequisites, since the new Dynamics II (ATM 317) should be taken prior to ATM 400. It was decided that students should have sufficient knowledge of dynamics prior to taking synoptic meteorology. The course description was also updated to reflect recent minor changes to the course material.</p>			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Department(s) having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

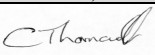
University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 10	
Please mark all that apply:			
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	New Course Cross-Listing Shared-Resources Course Deactivate / Activate Course (boldface & underline as appropriate)	Revision of: <input type="checkbox"/> Number <input type="checkbox"/> Title <input type="checkbox"/> Credits <input type="checkbox"/> Other (specify): _____	<input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisites
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A ATM 401</u> New: _____ Credits: <u>3</u>			
Course Title: <u>Synoptic Meteorology II</u>			
Course Description to appear in Bulletin:			
Application of advanced fundamental thermodynamic and dynamic concepts to the investigation of multi-scale weather phenomena; exploitation of ensemble and probabilistic forecasting techniques and remote sensing radar and satellite technologies in weather analysis and forecasting; application of fundamental synoptic and mesoscale concepts to a real-time severe weather and heavy precipitation forecasting exercise.			
Prerequisites statement to be appended to description in Bulletin:			
Prerequisites: A ATM 400, 418			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Update to prerequisites, since the new course, A ATM 418 (Dynamics III) should be taken prior to ATM 401. The course description was also updated to reflect recent minor changes to the course material.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Department(s) having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

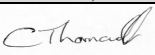
University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>11</u>	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input type="checkbox"/>
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input checked="" type="checkbox"/> Description
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits <input checked="" type="checkbox"/> Prerequisites
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): <u>Fall 2012</u>	
Course Number	Current: <u>A ATM 409</u>	New: _____	Credits: <u>3</u>
Course Title: <u>Atmospheric Precipitation Processes</u>			
Course Description to appear in Bulletin:			
<p>Same as at present</p>			
Prerequisites statement to be appended to description in Bulletin:			
<p>A ATM 316, 320; A MAT 311</p>			
If S/U is to be designated as the only grading system in the course, check here:		<input type="checkbox"/>	
This course is (will be) cross listed with (i.e., CAS ###):		_____	
This course is (will be) a shared-resources course with (i.e., CAS ###):		_____	
Explanation of proposal:			
<p>Change of prerequisites to reflect the change in the dynamics sequence.</p>			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)		Date	
Chris Thorncroft 		12-16-2011	
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	
		Dean of College (PRINT NAME/SIGN)	
		Date	
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	
		Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)	
		Date	

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>12</u>	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input checked="" type="checkbox"/>	Number <input checked="" type="checkbox"/> Description
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input checked="" type="checkbox"/> Prerequisites
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): <u>Fall 2012</u>	
Course Number	Current: <u>A ATM 410</u>	New: <u>A ATM 316</u>	Credits: <u>3</u>
Course Title: <u>Dynamic Meteorology I</u>			
Course Description to appear in Bulletin:			
<p>Equations and concepts that provide the basis for describing and understanding atmospheric motion systems on planetary and synoptic scales; review of mathematical concepts and tools; kinematics of horizontal flows; fundamental and apparent forces; basic conservation laws; elementary applications of the equations of motion.</p>			
Prerequisites statement to be appended to description in Bulletin:			
<p>Prerequisites: A ATM 211, A PHY 150 or 151 or T PHY 151, A MAT 214, 311 (the latter acceptable as a corequisite)</p>			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
<p>The change in course number to 300-level reflects changes in the ATM B.S. curriculum described in the narrative (the dynamics core, beginning with this course, now should be taken junior year). As a result, prerequisites change as indicated. In addition, a slight change to the course description is proposed.</p>			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 13	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input checked="" type="checkbox"/>	Number <input checked="" type="checkbox"/> Description <input checked="" type="checkbox"/>
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input checked="" type="checkbox"/> Prerequisites <input checked="" type="checkbox"/>
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A ATM 411</u> New: <u>A ATM 317</u> Credits: <u>3</u>			
Course Title: <u>Dynamic Meteorology II</u>			
Course Description to appear in Bulletin:			
<p>Application of the governing equations to describe and understand synoptic to planetary scale phenomena, including vertical motion, jet streaks, and the frontal cyclone; introduction of the concepts of vorticity and potential vorticity.</p>			
Prerequisites statement to be appended to description in Bulletin:			
<p>Prerequisites: A ATM 316</p>			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
<p>The change in course number to 300-level reflects changes in the ATM B.S. curriculum described in the narrative (the dynamics core now should be taken junior year). As a result, prerequisites change as indicated. The course description has also been updated.</p>			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

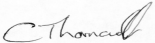
University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 14	
Please mark all that apply:			
<input checked="" type="checkbox"/>	New Course	Revision of:	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Number <input type="checkbox"/> Title <input type="checkbox"/> Credits </div> <div style="width: 45%;"> <input type="checkbox"/> Description <input type="checkbox"/> Prerequisites </div> </div>
<input type="checkbox"/>	Cross-Listing		
<input type="checkbox"/>	Shared-Resources Course		
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input checked="" type="checkbox"/>	Other (specify): Major Requirements
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: _____	New: A ATM 418	Credits: 3
Course Title: Dynamic Meteorology III			
Course Description to appear in Bulletin:			
<p>Application of the governing equations to describe and understand mesoscale phenomenon, including flow over topography, organized convection and severe weather, and the atmospheric boundary layer; mathematics and description of the components of numerical weather prediction models.</p>			
Prerequisites statement to be appended to description in Bulletin:			
<p>Prerequisites: A ATM 317, 320</p>			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
<p>This course will introduce mesoscale meteorology (for topics, see course syllabus) into the undergraduate curriculum, and will be required for the ATM B.S. It is the third course in the dynamics sequence, and should be taken the fall semester of a student's senior year (400-level).</p> <p>In adding a 400-level, course, and making ATM 321 a 400-level course, the major will continue to have the same number of 400-level courses required, since Dynamics I and Dynamics II have become 300-level courses.</p>			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
			Date
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)
			Date

University at Albany – State University of New York			
College of Arts and Sciences	Course Action Form	Proposal No. <u>15</u>	
Please mark all that apply:			
<input type="checkbox"/> New Course	Revision of: <input type="checkbox"/> Number	<input type="checkbox"/> Description	
<input type="checkbox"/> Cross-Listing	<input type="checkbox"/> Title	<input checked="" type="checkbox"/> Prerequisites	
<input type="checkbox"/> Shared-Resources Course	<input type="checkbox"/> Credits		
<input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/> Other (specify): _____		
Department: <u>Atmos. and Environmental Sci.</u>	To be effective (semester/year): <u>Fall 2012</u>		
Course Number	Current: <u>A ATM 421</u>	New: _____	Credits: <u>3</u>
Course Title: <u>Tropical Meteorology</u>			
Course Description to appear in Bulletin:			
Same as at present			
Prerequisites statement to be appended to description in Bulletin:			
Prerequisites: A ATM 316			
If S/U is to be designated as the only grading system in the course, check here:		<input type="checkbox"/>	
This course is (will be) cross listed with (i.e., CAS ###):		_____	
This course is (will be) a shared-resources course with (i.e., CAS ###):		_____	
Explanation of proposal:			
Due to changes in the dynamics sequence (316, 317, 418), the new prerequisite for ATM 421 is ATM 316, Dynamics I.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)


University at Albany – State University of New York			
College of Arts and Sciences	Course Action Form	Proposal No. <u>16</u>	
Please mark all that apply:			
<input type="checkbox"/> New Course	Revision of: <input type="checkbox"/> Number	<input type="checkbox"/> Description	
<input type="checkbox"/> Cross-Listing	<input type="checkbox"/> Title	<input checked="" type="checkbox"/> Prerequisites	
<input type="checkbox"/> Shared-Resources Course	<input type="checkbox"/> Credits		
<input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/> Other (specify): _____		
Department: <u>Atmos. and Environmental Sci.</u>	To be effective (semester/year): <u>Fall 2012</u>		
Course Number	Current: <u>A ATM 450</u>	New: _____	Credits: <u>3</u>
Course Title: <u>Computer Applications in Atmospheric Science</u>			
Course Description to appear in Bulletin:			
Same as at present			
Prerequisites statement to be appended to description in Bulletin:			
Prerequisites: A ATM 316, 350			
If S/U is to be designated as the only grading system in the course, check here:		<input type="checkbox"/>	
This course is (will be) cross listed with (i.e., CAS ###):		_____	
This course is (will be) a shared-resources course with (i.e., CAS ###):		_____	
Explanation of proposal:			
Simple change of prerequisites to match the new dynamics sequence and the recent introduction of A ATM 350 to the curriculum			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

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University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>17</u>	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits
<input checked="" type="checkbox"/>	<u>Deactivate</u> / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify):
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: <u>A ENV/GEO 435</u>	New: <u>-----</u>	Credits: <u>3</u>
Course Title: <u>Geohydrology</u>			
Course Description to appear in Bulletin:			

Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here:			<input type="checkbox"/>
This course is (will be) cross listed with (i.e., CAS ###):			_____
This course is (will be) a shared-resources course with (i.e., CAS ###):			_____
Explanation of proposal:			
Deactivate course (see curriculum revision narrative)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Department(s) having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)

Chair of Academic Programs Committee (PRINT NAME/SIGN)	Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)	Date
University at Albany – State University of New York			
College of Arts and Sciences	Course Action Form		Proposal No. 18
Please mark all that apply:			
<input type="checkbox"/> New Course	Revision of: <input type="checkbox"/> Number		<input type="checkbox"/> Description
<input type="checkbox"/> Cross-Listing	<input type="checkbox"/> Title		<input type="checkbox"/> Prerequisites
<input type="checkbox"/> Shared-Resources Course	<input type="checkbox"/> Credits		
<input checked="" type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)		<input type="checkbox"/> Other (specify): _____	
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): <u>Fall 2012</u>	
Course Number	Current: <u>A GEO 223/223Z</u>	New: <u>-----</u>	Credits: <u>1</u>
Course Title: <u>Introductory Field Geology</u>			
Course Description to appear in Bulletin:			

Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here:		<input type="checkbox"/>	
This course is (will be) cross listed with (i.e., CAS ###):		_____	
This course is (will be) a shared-resources course with (i.e., CAS ###):		_____	
Explanation of proposal:			
Deactivate course (see curriculum revision narrative)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Dean of College (PRINT NAME/SIGN)	
Date		Date	
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)	
Date		Date	

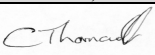
University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 19	
Please mark all that apply:			
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	New Course Cross-Listing Shared-Resources Course <u>Deactivate</u> / Activate Course (boldface & underline as appropriate)	Revision of: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Number Title Credits Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: A GEO 330	New: -----	Credits: 3
Course Title: Structural Geology			
Course Description to appear in Bulletin:			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Deactivate course (see curriculum revision narrative)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences	Course Action Form	Proposal No. 20	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input type="checkbox"/> Description <input type="checkbox"/>
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input type="checkbox"/> Prerequisites <input type="checkbox"/>
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits
<input checked="" type="checkbox"/>	<u>Deactivate</u> / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: A GEO 331	New: <u>-----</u>	Credits: 1
Course Title: Field excursions in Structural Geology			
Course Description to appear in Bulletin:			

Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here:		<input type="checkbox"/>	
This course is (will be) cross listed with (i.e., CAS ###):			
This course is (will be) a shared-resources course with (i.e., CAS ###):			
Explanation of proposal:			
Deactivate course (see curriculum revision narrative)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>21</u>	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits
<input checked="" type="checkbox"/>	<u>Deactivate</u> / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: A GEO 332	New: <u>-----</u>	Credits: <u>1</u>
Course Title: Structural Geology Laboratory			
Course Description to appear in Bulletin:			

Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Deactivate course (see curriculum revision narrative)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

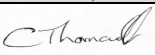
University at Albany – State University of New York			
College of Arts and Sciences	Course Action Form	Proposal No. <u>22</u>	
Please mark all that apply:			
<input type="checkbox"/> New Course	Revision of: <input type="checkbox"/>	Number <input type="checkbox"/>	Description <input type="checkbox"/>
<input type="checkbox"/> Cross-Listing		Title <input type="checkbox"/>	Prerequisites <input type="checkbox"/>
<input type="checkbox"/> Shared-Resources Course		Credits <input type="checkbox"/>	
<input checked="" type="checkbox"/> <u>Deactivate</u> / Activate Course (boldface & underline as appropriate)		Other (specify): <input type="text"/>	
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: A ENV/GEO 466	New: <u>-----</u>	Credits: 3
Course Title: Marine and Estuary Systems			
Course Description to appear in Bulletin:			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here:		<input type="checkbox"/>	
This course is (will be) cross listed with (i.e., CAS ###):		<input type="text"/>	
This course is (will be) a shared-resources course with (i.e., CAS ###):		<input type="text"/>	
Explanation of proposal:			
Deactivate course (see curriculum revision narrative)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 23	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits
<input checked="" type="checkbox"/>	<u>Deactivate</u> / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: <u>A GEO 470</u>	New: _____	Credits: <u>4</u>
Course Title: <u>Tectonics</u>			
Course Description to appear in Bulletin:			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Deactivate course (see curriculum revision narrative)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN) _____ Date _____			
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN) _____		Dean of College (PRINT NAME/SIGN) _____	
Date _____		Date _____	
Chair of Academic Programs Committee (PRINT NAME/SIGN) _____		Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN) _____	
Date _____		Date _____	

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 24	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of:	<input type="checkbox"/> Number
<input type="checkbox"/>	Cross-Listing		<input type="checkbox"/> Description
<input type="checkbox"/>	Shared-Resources Course		<input type="checkbox"/> Prerequisites
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input checked="" type="checkbox"/>	Other (specify): Major requirements
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: A GOG 304 New: _____ Credits: 3			
Course Title: <u>Climatology</u>			
Course Description to appear in Bulletin: ----			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here:			<input type="checkbox"/>
This course is (will be) cross listed with (i.e., CAS ###):			_____
This course is (will be) a shared-resources course with (i.e., CAS ###):			_____
Explanation of proposal:			
Change from required course in Climate concentration to elective			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
			Date
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)
			Date

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. <u>25</u>	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of:	<input type="checkbox"/> Number
<input type="checkbox"/>	Cross-Listing		<input type="checkbox"/> Description
<input type="checkbox"/>	Shared-Resources Course		<input type="checkbox"/> Prerequisites
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input checked="" type="checkbox"/>	Other (specify): Major requirements
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A ENV 105</u> New: _____ Credits: <u>3</u>			
Course Title: Introduction to Environmental Science			
Course Description to appear in Bulletin:			

Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Course should be removed from list of required courses in ENV B.S. degree (will be replaced by ATM 315; see ENV B.S. narrative)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
			Date
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)
			Date

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 26	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input type="checkbox"/>
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input type="checkbox"/>
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits <input type="checkbox"/>
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A ENV 306</u> New: _____ Credits: <u>3</u>			
Course Title: <u>Climate Variability and Change</u>			
Course Description to appear in Bulletin: ----			
Prerequisites statement to be appended to description in Bulletin:			
Prerequisite(s): A MAT 113 or 119 or T MAT 119; A ATM 210. Co-requisite: A ATM 315 or permission of instructor.			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Update to pre-requisites, now requiring revised statistics course (A ATM 315)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
			Date
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)
			Date

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 27	
Please mark all that apply:			
<input type="checkbox"/> New Course <input type="checkbox"/> Cross-Listing <input type="checkbox"/> Shared-Resources Course <input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)	Revision of:	<input type="checkbox"/> Number <input type="checkbox"/> Title <input type="checkbox"/> Credits <input type="checkbox"/> Other (specify): _____	<input type="checkbox"/> Description <input checked="" type="checkbox"/> Prerequisites
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A ENV 327</u> New: _____ Credits: <u>3</u>			
Course Title: <u>Meteorological and Environmental Measurement</u>			
Course Description to appear in Bulletin: <div style="border: 1px solid black; height: 150px; margin-top: 5px;"></div>			
Prerequisites statement to be appended to description in Bulletin:			
Pre-requisite(s): A MAT 113 or 119 or T MAT 119; A PHY 140 or 141 or TPHY 141; A ATM 210.			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Update to pre-requisites, removing Physics that is <i>not</i> calculus based as an acceptable pre-requisite. In addition, ATM 210 is added as a prerequisite, since fundamental atmospheric science is necessary in order to learn instrumentation. ATM 210 is required for both the environmental science and atmospheric science majors, so this added prerequisite shouldn't pose an enrollment problem.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 28	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of:	<input type="checkbox"/>
<input type="checkbox"/>	Cross-Listing		<input type="checkbox"/>
<input type="checkbox"/>	Shared-Resources Course		<input type="checkbox"/>
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Number	Description
		Title	Prerequisites
		Credits	
		Other (specify): Major Requirements	
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A BIO 230</u> New: _____ Credits: <u>3</u>			
Course Title: <u>People and Resources in Ecological Perspective</u>			
Course Description to appear in Bulletin:			
<div style="border-bottom: 1px solid black; margin-bottom: 5px;">----</div>			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Course should be removed from list of required courses in ENV B.S. degree (BIO concentration)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 29	
Please mark all that apply:			
<input type="checkbox"/> New Course <input type="checkbox"/> Cross-Listing <input type="checkbox"/> Shared-Resources Course <input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)	Revision of:	<input type="checkbox"/> Number <input type="checkbox"/> Title <input type="checkbox"/> Credits <input checked="" type="checkbox"/> Other (specify):	<input type="checkbox"/> Description <input type="checkbox"/> Prerequisites Major Requirements
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): <u>Fall 2012</u>	
Course Number Current: <u>A BIO 212Y</u> New: _____ Credits: <u>4</u>			
Course Title: <u>Genetics</u>			
Course Description to appear in Bulletin:			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Course should be added to list of required courses in ENV B.S. degree (BIO concentration)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 30	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of:	<input type="checkbox"/> Number
<input type="checkbox"/>	Cross-Listing		<input type="checkbox"/> Description
<input type="checkbox"/>	Shared-Resources Course		<input type="checkbox"/> Prerequisites
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input checked="" type="checkbox"/>	Other (specify): Major Requirements
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: <u>A BIO 320</u>	New: _____	Credits: <u>3</u>
Course Title: <u>Ecology</u>			
Course Description to appear in Bulletin:			
<div style="border-bottom: 1px solid black; margin-bottom: 5px;">----</div>			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Course should be added to list of required courses in ENV B.S. degree (BIO concentration)			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
			Date
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)
			Date

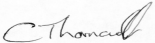
University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 31	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input checked="" type="checkbox"/> Description
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input checked="" type="checkbox"/> Prerequisites
<input type="checkbox"/>	Shared-Resources Course	<input checked="" type="checkbox"/>	Credits
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number Current: <u>A GEO 221</u> New: _____ Credits: <u>3</u>			
Course Title: <u>Minerals, Rocks and Geological Time</u>			
Course Description to appear in Bulletin:			
Physical properties, composition and structure of common rock-forming minerals; processes controlling the origin, composition, and emplacement of common igneous rocks; weathering and downslope transport, depositional facies and origin of common sedimentary rocks; formation and exhumation of metamorphic rocks; physical and bio-stratigraphy, quantitative methods for geological age determination. Two lectures each week.			
Prerequisites statement to be appended to description in Bulletin:			
Pre-requisite: A CHM 120 or 130 or T CHM 130; or permission of instructor.			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Course will be taught by new instructor, Steve Howe. Prerequisites have changed as some of previously required courses are no longer on being offered. We have also removed the lab section from this course, reducing it from 4 to 3 credits.			
We have also removed the prerequisite of ENV 105, as it is no longer required for the environmental science major.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)


University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 32	
Please mark all that apply:			
<input checked="" type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input type="checkbox"/> Description <input type="checkbox"/>
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input type="checkbox"/> Prerequisites <input type="checkbox"/>
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits <input type="checkbox"/>
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: <u>A ATM 480</u>	New: _____	Credits: <u>1-4</u>
Course Title: <u>Special Topics in Atmospheric Science</u>			
Course Description to appear in Bulletin:			
In-depth analysis of a special topic in atmospheric science. May be repeated if topic changes.			
Prerequisites statement to be appended to description in Bulletin:			
Co-requisite: A ATM 316, and permission of instructor.			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
With incoming new faculty and occasional visiting faculty, we would like to be able to offer additional elective courses for undergraduates on a special topic related to the expertise or interest of the instructor.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 33	
Please mark all that apply:			
<input checked="" type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input type="checkbox"/> Description <input type="checkbox"/>
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input type="checkbox"/> Prerequisites <input type="checkbox"/>
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits <input type="checkbox"/>
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: <u>A ENV 480</u>	New: _____	Credits: <u>1-4</u>
Course Title: <u>Special Topics in Environmental Science</u>			
Course Description to appear in Bulletin:			
In-depth analysis of a special topic in environmental science. May be repeated if topic changes.			
Prerequisites statement to be appended to description in Bulletin:			
Prerequisite: A ATM 210 or 210Z, and permission of instructor.			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
With incoming new faculty and occasional visiting faculty, we would like to be able to offer additional elective courses for undergraduates on a special topic related to the expertise or interest of the instructor.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 34	
Please mark all that apply:			
<input type="checkbox"/>	New Course	Revision of: <input type="checkbox"/>	Number <input type="checkbox"/>
<input type="checkbox"/>	Cross-Listing	<input type="checkbox"/>	Title <input type="checkbox"/>
<input type="checkbox"/>	Shared-Resources Course	<input type="checkbox"/>	Credits <input type="checkbox"/>
<input type="checkbox"/>	Deactivate / Activate Course (boldface & underline as appropriate)	<input type="checkbox"/>	Other (specify): _____
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: <u>A ENV201</u>	New: _____	Credits: <u>3</u>
Course Title: <u>Environmental Analysis</u>			
Course Description to appear in Bulletin:			
Same as before but with prerequisite ENV 105 removed			
Prerequisites statement to be appended to description in Bulletin:			
Prerequisites: none			
If S/U is to be designated as the only grading system in the course, check here: <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
Remove the prerequisite of ENV 105 as it is no longer required for the environmental science major.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft			12-16-2011
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)

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University at Albany – State University of New York			
College of Arts and Sciences		Course Action Form	
		Proposal No. 35	
Please mark all that apply:			
<input type="checkbox"/> New Course	Revision of:	<input type="checkbox"/> Number	<input type="checkbox"/> Description
<input type="checkbox"/> Cross-Listing		<input type="checkbox"/> Title	<input checked="" type="checkbox"/> Prerequisites
<input type="checkbox"/> Shared-Resources Course		<input type="checkbox"/> Credits	
<input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)		<input type="checkbox"/> Other (specify): _____	
Department: <u>Atmos. and Environmental Sci.</u>		To be effective (semester/year): Fall 2012	
Course Number	Current: <u>ENV 250</u>	New: <u>-----</u>	Credits: <u>3</u>
Course Title: <u>Sustainable Development: Energy and Resources</u>			
Course Description to appear in Bulletin:			
Same as before but with prerequisite ENV105 or ATM 100 removed			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here:			<input type="checkbox"/>
This course is (will be) cross listed with (i.e., CAS ###):			_____
This course is (will be) a shared-resources course with (i.e., CAS ###):			_____
Explanation of proposal:			
Remove the prerequisite of ENV 105 or equivalent, as it is no longer required for the environmental science major.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)			Date
Chris Thorncroft 			12-16-2011
Approved by Chair(s) of Department(s) having cross-listed course(s) (PRINT NAME/SIGN)		Date	Dean of College (PRINT NAME/SIGN)

Chair of Academic Programs Committee (PRINT NAME/SIGN)	Date	Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)	Date
University at Albany – State University of New York			
College of Arts and Sciences	Course Action Form		Proposal No. 36
Please mark all that apply:			
<input type="checkbox"/> New Course	Revision of:	<input type="checkbox"/> Number	<input type="checkbox"/> Description
<input type="checkbox"/> Cross-Listing		<input type="checkbox"/> Title	<input checked="" type="checkbox"/> Prerequisites
<input type="checkbox"/> Shared-Resources Course		<input type="checkbox"/> Credits	
<input type="checkbox"/> Deactivate / Activate Course (boldface & underline as appropriate)		<input type="checkbox"/> Other (specify):	
Department: Atmos. and Environmental Sci.		To be effective (semester/year): Fall 2012	
Course Number	Current: ENV 490	New: -----	Credits: 3
Course Title: Major Topics in Environmental Science			
Course Description to appear in Bulletin:			
Same as before but with prerequisite ENV105 removed			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check here:		<input type="checkbox"/>	
This course is (will be) cross listed with (i.e., CAS ###):		_____	
This course is (will be) a shared-resources course with (i.e., CAS ###):		_____	
Explanation of proposal:			
Remove the prerequisite of ENV 105, as it is no longer required for the environmental science major.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
Chair of Proposing Department (TYPE NAME/SIGN)		Date	
Chris Thorncroft 		12-16-2011	
Approved by Chair(s) of Departments having cross-listed course(s) (PRINT NAME/SIGN)		Dean of College (PRINT NAME/SIGN)	
Date		Date	
Chair of Academic Programs Committee (PRINT NAME/SIGN)		Dean of Graduate (Undergraduate) Studies (PRINT NAME/SIGN)	
Date		Date	

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