Course Approval Form

Action Requested:

- [ ] Create new course
- [ ] Inactivate existing course
- [x] Modify existing course (check all that apply)
  - [x] Title
  - [ ] Credits
  - [ ] Repeat Status
  - [ ] Grade Type
  - [ ] Prereq/coreq
  - [ ] Schedule Type
  - [ ] Restrictions
  - [x] Other: Catalog description

Course Level:

- [ ] Undergraduate
- [x] Graduate

College/School: COS
Department: AOES
Submitted by: Barry Klinger
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Subject Code: CLIM
Number: 751
(Do not list multiple codes or numbers. Each course proposal must have a separate form.)

Effective Term:
- [ ] Fall
- [x] Spring   *Year* 2016
- [ ] Summer

Title:
Current: Predictability of Weather and Climate
Banner (30 characters max w/ spaces):
New: Predictability and Prediction of Weather and Climate

Fulfills Mason Core Req? (undergrad only)
- [ ] Currently fulfills requirement
- [ ] Submission in progress

Credits: (check one)
- [ ] Fixed _____ or
- [ ] Variable _____ to _____

Repeat Status: (check one)
- [ ] Not Repeatable (NR)
- [ ] Repeatable within degree (RD)
- [ ] Repeatable within term (RT)

Maximum credits allowed: _____

Grade Mode: (check one)
- [ ] Regular (A, B, C, etc.)
- [ ] Satisfactory/No Credit
- [ ] Special (A, B C, etc. +IP)

Schedule Type: (check one) LEC can include LAB or RCT
- [ ] Lecture (LEC)
- [ ] Lab (LAB)
- [ ] Recitation (RCT)
- [ ] Internship (INT)
- [ ] Independent Study (IND)
- [ ] Seminar (SEM)
- [ ] Studio (STU)

Prerequisite(s):

Corequisite(s):

Instructional Mode:
- [ ] 100% face-to-face
- [ ] Hybrid: ≤ 50% electronically delivered
- [ ] 100% electronically delivered

Restrictions Enforced by System: Major, College, Degree, Program, etc**.** (include code)

Equivalencies: (check only as applicable)
- [ ] YES, course is 100% equivalent to: _____
- [ ] YES, course is being renumbered to/will replace the following: _____

Catalog Copy for NEW Courses Only (Consult University Catalog for models)

Description (No more than 60 words, use verb phrases and present tense)	**Notes** (List additional information for the course)
Covers predictability and seamless prediction of weather and climate for timescales ranging from days to decades. Studies limitations to predictability due to chaos, and possible sources of predictability due to slowly varying surface boundary conditions produced by interactions among atmosphere, ocean and land system. Discusses predictability of droughts and floods, monsoons, ENSO, decadal variations and climate change.	

Indicate number of contact hours: Hours of Lecture or Seminar per week: _____   Hours of Lab or Studio: _____
When Offered: (check all that apply)   [ ] Fall   [ ] Summer   [ ] Spring

Approval Signatures

_____   _____
Department Approval   Date   College/School Approval   Date

If this course includes subject matter currently dealt with by any other units, the originating department must circulate this proposal for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this proposal.

Unit Name	Unit Approval Name	Unit Approver's Signature	Date

For Graduate Courses Only

_____   _____   _____
Graduate Council Member   Provost Office   Graduate Council Approval Date

Course Proposal Submitted to the College of Science Curriculum Committee (COSCC)

The form above is processed by the Office of the University Registrar. This second page is for the COSCC's reference. Please complete the applicable portions of this page to clearly communicate what the form above is requesting.

FOR ALL COURSES (required)
Course Number and Title: CLIM 751 Predictability of Weather and Climate

Date of Departmental Approval: 24 November 2015

FOR MODIFIED COURSES (required if modifying a course)
- Summary of the Modification:

Change title and catalog description.

- Reason for the Modification:

Course will become a new requirement for Climate Dynamics PhD and is being revamped to be a better introduction to the topic of predictability. Since prediction (science of forecasting a future state of the atmosphere) is intimately connected to predictability (the potential for a given feature of the atmosphere to be forecast), both topics are covered by the class. In addition to changing the description, we have also shortened it in order to comply with the 60 word limit.

- Text before Modification (title, repeat status, catalog description, etc.):

CLIM 751 - Predictability of Weather and Climate

Credits: 3
Not Repeatable

Covers predictability and seamless prediction of weather and climate for timescales ranging from days to decades. Studies limitations to predictability due to chaos, and possible sources of predictability due to slowly varying surface boundary conditions produced by interactions among atmosphere, ocean and land system.   Discusses predictability of droughts and floods, monsoons, ENSO, decadal variations and climate change.

- Text after Modification (title, repeat status, catalog description, etc.):

CLIM 751 - Predictability and Prediction of Weather and Climate

Credits: 3
Not Repeatable

Covers predictability and seamless prediction of weather and climate for timescales ranging from days to decades. Studies limitations to predictability due to chaos, and possible sources of predictability due to slowly varying surface boundary conditions produced by interactions among atmosphere, ocean and land system. Discusses predictability of droughts and floods, monsoons, ENSO, and other short term climate variations. The course also covers predictability of decadal variations and climate change.