Course Approval Form

For instructions see:
http://registrar.gmu.edu/facultystaff/catalog-revisions/course/

Action Requested:
- Create new course
- Inactivate existing course
- Modify existing course (check all that apply)
  - Title
  - Prereq/coreq
  - Credits
  - Schedule Type
  - Repeat Status
  - Restrictions
  - Grade Type

Course Level:
- Undergraduate
- Graduate

College/School:
- COS

Submitted by:
- Barry Klinger

Department:
- AOES

Ext:
- 3-9227

Email:
- bklinger@gmu.edu

Subject Code:
- CLIM

Number:
- 751

Effective Term:
- Fall
- Spring
- Year 2016

Title:
- Current: Predictability of Weather and Climate
- New: Predictability and Prediction of Weather and Climate

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

Credits:
- Fixed or Repeatable:
- Not Repeatable (NR)
- Repeatable within degree (RD)
- Repeatable within term (RT)
- Maximum credits allowed:

Grad Mode:
- Regular (A, B, C, etc.)
- Satisfactory/No Credit
- Special (A, B C, etc. +IP)

Schedule Type:
- Lecture (LEC)
- Lab (LAB)
- Recitation (RCT)
- Internship (INT)
- Independent Study (IND)
- Seminar (SEM)
- Studio (STU)

Prerequisite(s):

Corequisite(s):

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

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

Description (No more than 60 words, use verb phrases and present tense)
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.

Notes (List additional information for the course)

Equivalencies:
- YES, course is 100% equivalent to:
- YES, course is being renumbered to/will replace the following:

Indicate number of contact hours:

When Offered: (check all that apply)
- Fall
- Summer
- Spring

Approval Signatures

Department Approval:

College/School Approval:

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:

Department Approval Date:

College/School Approval Date:

For Graduate Courses Only

Graduate Council Member:

Provost Office:

Graduate Council Approval Date:

For Registrar Office’s Use Only: Banner ___________________________ Catalog ___________________________ revised 6/22/15
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.
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.