



Course Approval Form

For approval of new courses and deletions or modifications to an existing course.

registrar.gmu.edu/facultystaff/curriculum

Action Requested:

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

Course Level:

Undergraduate
 Graduate

College/School: **Department:**
Submitted by: **Ext:** **Email:**

Subject Code: **Number:** **Effective Term:** Fall Spring Summer
(Do not list multiple codes or numbers. Each course proposal must have a separate form.) Year

Title: Current
 Banner (30 characters max including spaces)
 New

Credits: (check one) 3 Fixed Variable or 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) 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.

Are there equivalent course(s)?
 Yes No
 If yes, please list

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)
<input type="text"/>	<input type="text"/>

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
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

For Graduate Courses Only

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

Course Proposal Submitted to the Curriculum Committee of the College of Science

1. COURSE NUMBER AND TITLE: CLIM 411 Introduction to Atmospheric Dynamics

Course Prerequisites: PHYS 260, PHYS 261, MATH 214, MATH 313.

Catalog Description:

Covers the basic conservation laws of mass, momentum, and energy and a scaling analysis of the equation of motion and the thermodynamic equation; concepts of circulation and vorticity, balanced flows in the atmosphere (e.g., the geostrophic wind and its vertical shear, and the thermal wind relationship), planetary waves and wave-mean flow interaction. Also covers the baroclinic instability theory and energy transfer in the life cycle of the baroclinic eddies and two-layer quasi-geostrophic theory for the mid-latitude atmospheric general circulation. Hadley circulation dynamics may be discussed if time permits.

2. COURSE JUSTIFICATION:

CLIM 411 is being deleted because it has been replaced by CLIM 311 which covers similar material but on a slightly less sophisticated level.