7-GPCh. Revised 11/6/2015

Submit originals and one copy and electronic copy to Governance/Faculty Senate Office (email electronic copy to provost@alaska.edu)

PROGRAM/DEGREE REQUIREMENT CHANGE (MAJOR/MINOR)

SUBMITTED BY:

<table>
<thead>
<tr>
<th>Department</th>
<th>Atmospheric Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by</td>
<td>Barbara Day</td>
</tr>
<tr>
<td>Email Contact</td>
<td><a href="mailto:bday@alaska.edu">bday@alaska.edu</a></td>
</tr>
</tbody>
</table>

College/School | CNSM |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td>x7368</td>
</tr>
</tbody>
</table>

Faculty Contact | Richard L. Collins, x7607, rcollins@alaska.edu |

See http://www.uaf.edu/uafigov/faculty/cd for a complete description of the rules governing curriculum & course changes.

PROGRAM IDENTIFICATION:

<table>
<thead>
<tr>
<th>DEGREE PROGRAM</th>
<th>Atmospheric Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Level: (i.e., Certificate, A.A., A.A.S., B.A., B.S., M.A., M.S., Ph.D.)</td>
<td>MS &amp; PhD</td>
</tr>
</tbody>
</table>

A. CHANGE IN DEGREE REQUIREMENTS: (Brief statement of program/degree changes and objectives)

The current wording was not accurate and this new wording makes the requirements clear.

B. CURRENT REQUIREMENTS AS IT APPEARS IN THE CATALOG:

M.S. Degree
1. Complete the general university requirements (page 199).
2. Complete the master's degree requirements (page 203).
3. Complete four of the five following basic courses in atmospheric sciences:
   ATM F601—Introduction to Atmospheric Science .............................3
   ATM F606—Atmospheric Chemistry ...........................................3
   ATM F613—Atmospheric Radiation ............................................3
   ATM F615—Cloud Physics .......................................................3
   ATM F645—Atmospheric Dynamics .............................................3
4. Complete additional approved F600-level courses ........................................... 12
5. Complete ATM F699—Thesis ..................................................6-12
6. Minimum credits required ..........................................................30

Ph.D. Degree
1. Complete the general university requirements (page 199).
2. Complete the Ph.D. degree requirements (page 204).
3. Complete the following basic courses in atmospheric sciences:
   ATM F601—Introduction to Atmospheric Science .............................3
   ATM F606—Atmospheric Chemistry ...........................................3
   ATM F613—Atmospheric Radiation ............................................3
   ATM F615—Cloud Physics .......................................................3
   ATM F645—Atmospheric Dynamics .............................................3
4. Complete the additional course requirements determined in conjunction with the graduate advisory committee
5. Minimum credits required ..........................................................18

C. PROPOSED REQUIREMENTS AS IT WILL APPEAR IN THE CATALOG WITH THESE CHANGES:
(Underline new wording strike-through old wording and use complete catalog format)

M.S. Degree
1. Complete the general university requirements (page 199).
2. Complete the master's degree requirements (page 203).
3. Complete four of the five following basic courses in atmospheric sciences:
   ATM F601—Introduction to Atmospheric Science .............................................. 3
   ATM F606—Atmospheric Chemistry ................................................................. 3
   ATM F613—Atmospheric Radiation ................................................................. 3
   ATM F615—Cloud Physics .................................................................................. 3
   ATM F645—Atmospheric Dynamics ................................................................. 3
4. Complete additional approved F600-level courses .......................................... 12
5. Complete ATM F699—Thesis ........................................................................... 6-12
6. Minimum credits required .................................................................................. 30

**Ph.D. Degree**

1. Complete the general university requirements (page 199).
2. Complete the Ph.D. degree requirements (page 204)
3. Complete the following basic courses in atmospheric sciences:
   ATM F601—Introduction to Atmospheric Science .............................................. 3
   ATM F606—Atmospheric Chemistry ................................................................. 3
   ATM F613—Atmospheric Radiation ................................................................. 3
   ATM F615—Cloud Physics .................................................................................. 3
   ATM F645—Atmospheric Dynamics ................................................................. 3
4. Complete the additional course requirements determined in conjunction with the graduate advisory committee
5. Complete 12 additional credits of approved F600-level courses of which at least 6 are in atmospheric sciences (ATM) ................................................................. 12
6. Minimum thesis credits required .................................................................... 18
7. Complete additional course requirements as determined in conjunction with the graduate advisory committee.

---

**D. ESTIMATED IMPACT**

**WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.**

No impact.

**E. IMPACTS ON PROGRAMS/DEPTS:**

What programs/departments will be affected by this proposed action?
Include information on the Programs/Departments contacted (e.g., email, memo)

No impact.

**F. IF MAJOR CHANGE - ASSESSMENT OF THE PROGRAM:**

Description of the student learning outcomes assessment process.)

This change does not impact our SLOA.

---

**JUSTIFICATION FOR ACTION REQUESTED**

The purpose of the department and campus-wide curriculum committees is to scrutinize program/degree change applications to make sure that the quality of UAP education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. If you drop a course, is it because the material is covered elsewhere? Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the program is not compromised as a result.
The change addresses an ambiguity in the current requirements. For an MS student the intent was to
require students to take four of five core classes and six additional credits (typically two classes) for a
minimum requirement of 18 course credits (typically six classes). This requirement of four-core classes
is called the MS core requirement. The current catalog suggests a minimum requirement of four-of-five
core courses and an additional four courses for a minimum of eight courses. The change clarifies the
minimum requirement that is consistent with the general degree requirements. The minimum total
number of credits meets the general degree requirements.

The change addresses the need for PhD students to acquire depth in the discipline of atmospheric
sciences, by requiring that for a PhD student, they take five core courses and 12 additional credits (of
which six are in atmospheric sciences, with ATM designator) subsequent to their undergraduate degree.
Thus a student typically will have taken a minimum of nine 600-level classes beyond their undergraduate
classes. This requirement of five core courses is called the PhD core requirement. This codifies current
practice in the department. Students who have an earned MS in atmospheric sciences, with the
agreement of their committee, may meet some required core-course requirements through graduate
classes taken previously during their MS studies. ATM F601 is required of all students. Thus, given the
fact that MS students may meet the core requirement through prior classes, we do not specify a
"minimum total" number of credits for PhD.

APPROVALS:

Uma S. Bhatt
Signature, Chair Atmospheric Sciences
Date 11-2-15

Signature, Chair, College/School Curriculum CNSM
Date 11-2-15

Signature, Dean, College of CNSM
Date 11-4-15

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

Signature, Chair, UAF Faculty Senate Curriculum
Review Committee
Date