

Revision for ATOC 315

Proposal Reference Number : 2060
 PRN Alias : 10-11#99
 Version No : 5
 Submitted By : Prof Frederic Fabry
 Edited By : Ms Josie D'Amico

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Summary of Changes **Course Title, Course Description, Prerequisites**

| | Current Data | New Data | | | | | | | | |
|--------------------------------|--|---|-------------------------|--------------------------|--------------------------|---|----------------------------|--------------------------------------|--------------------------|--|
| Program Affected? | | Y | | | | | | | | |
| Program Change Form Submitted? | | N (Simple Change) - This change will affect the Liberal Program: Core Science Component in Atmospheric and Oceanic Sciences, Major in Atmospheric Science, Major in Atmospheric Science: Atmospheric Chemistry, Honours in Atmospheric Science, Honours in Atmospheric Science: Atmospheric Chemistry, Diploma in Meteorology. Program revision forms for these programs have been submitted. Program revision forms for the Minor in atmospheric science, and Joint major in atmospheric science and physics programs will not be submitted since the changes to these programs are considered Simple Changes. | | | | | | | | |
| Subject/Course/Term | ATOC 315 z one term | | | | | | | | | |
| Credit Weight or CEU's | 3 credits. | | | | | | | | | |
| Course Activities | z A - Lecture | | | | | | | | | |
| Course Title | <table border="1"> <tr> <td>Course Title on Transcript</td> <td>Water in the Atmosphere</td> </tr> <tr> <td>Course Title on Calendar</td> <td>Water in the Atmosphere.</td> </tr> </table> | Course Title on Transcript | Water in the Atmosphere | Course Title on Calendar | Water in the Atmosphere. | <table border="1"> <tr> <td>Course Title on Transcript</td> <td>Thermodynamics and Convection</td> </tr> <tr> <td>Course Title on Calendar</td> <td>Atmospheric Thermodynamics and Convection</td> </tr> </table> | Course Title on Transcript | Thermodynamics and Convection | Course Title on Calendar | Atmospheric Thermodynamics and Convection |
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| Course Title on Calendar | Atmospheric Thermodynamics and Convection | | | | | | | | | |
| Rationale | | "Water in the atmosphere", modified from an old "Cloud Physics" course to benefit programs in the School of Environment was not satisfying our needs and had drifted into a mild expansion of ATOC 214. Because we need both a full cloud physics course as well as a full thermodynamics/convection course at the undergraduate level, we are expanding and rigorizing the thermodynamics/convection component of ATOC 315 while moving the cloud physics component out to another course. In the process, prerequisites were updated for clarity and to encourage students to take the courses in the right | | | | | | | | |

sequence.

Responsible Instructor Consultation Reports

Course Description Global distribution of water in the atmosphere. Moist processes. Global and mesoscale precipitation systems. Quantitative forecasting of precipitation. Extreme precipitation events. Large-scale influences. Precipitation modification. Buoyancy, stability, and vertical oscillations. Dry and moist adiabatic processes. Resulting dry and precipitating convective circulations from the small scale to the global scale. Mesoscale precipitation systems from the cell to convective complexes. Severe convection, downbursts, mesocyclones.

Teaching Dept. 0291 : Atmospheric & Oceanic Sciences

Administering Faculty/Unit SC : Faculty of Science

Prerequisites Prerequisite: ATOC 214

Prerequisites: ATOC 214 and MATH 222

Web Registration Blocked

Corequisites

Restrictions

Supplementary Calendar Info 1. Fall 2. 3 hours lecture

Additional Course Charges

Campus

Projected Enrollment

Requires Resources Not Currently Available

Explanation for Required Resources

Consultation Reports Attached? Y

z ConsultationATOC315 View

Effective Term of Implementation

201109

File Attachments

No attachments have been saved yet.

To be completed by the Faculty

For Continuing Education Use

Approvals Summary

Show all comments

| Version No. | Departmental Curriculum Committee | Departmental Meeting | Departmental Chair | Other Faculty | Curric/Academic Committee | Faculty | SCTP | Version Status |
|-------------|-----------------------------------|----------------------|---|---------------|---------------------------|---------|------|--|
| 5 | | | | | | | | Approved by Departmental Chair Edited by: Josie D'Amico on: Nov 17 2010 |
| 4 | | | | | | | | Approved by Departmental Chair Edited by: Josie D'Amico on: Nov 17 2010 |
| 3 | | | | | | | | Approved by Departmental Chair Edited by: Josie D'Amico on: Nov 17 2010 |
| 2 | | | | | | | | Approved by Departmental Chair Edited by: Frederic Fabry on: Oct 28 2010 |
| 1 | | | Approved John Richard Gyakum Meeting Date: Sep 20 2010 Approval Date: Sep 20 2010 View Comments | | | | | Approved by Departmental Chair Created on: Sep 20 2010 |