

## 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 <ul style="list-style-type: none"><li>one term</li></ul>									
Credit Weight or CEU's	3 credits.									
Course Activities	<ul style="list-style-type: none"><li>A - Lecture</li></ul>									
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><b>Thermodynamics and Convection</b></td> </tr> <tr> <td>Course Title on Calendar</td> <td><b>Atmospheric Thermodynamics and Convection</b></td> </tr> </table>	Course Title on Transcript	<b>Thermodynamics and Convection</b>	Course Title on Calendar	<b>Atmospheric Thermodynamics and Convection</b>
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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		
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.	<b>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.</b>
Teaching Dept.	0291 : Atmospheric & Oceanic Sciences	
Administering Faculty/Unit	SC : Faculty of Science	
Prerequisites	Prerequisite: ATOC 214	<b>Prerequisites: ATOC 214 and MATH 222</b>  Web Registration Blocked? : <input type="checkbox"/> N
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  • ConsultationATOC315.pdf <input type="button" value="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

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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 <a href="#">View Comments</a>					Approved by Departmental Chair Created on: Sep 20 2010