# ATMOSPHERIC CHEMISTRY MINOR

Atmospheric and Oceanic Science (AOSC)
3417 Computer and Space Sciences Building
Phone: 301-405-5391
http://atmos.umd.edu

Program Directors: T. Canty, Ph.D. and A. Jones, Ph.D.

This minor will provide the students with a general background in meteorology as offered by the lower level required courses, and a background on issues in atmospheric chemistry. This minor track is intended for students who might pursue careers where background in atmospheric chemistry is needed, such as air pollution, atmospheric chemistry, and environmental issues. It is aimed at students that might consider graduate work in atmospheric chemistry, or prepare them for a very favorable job market in the Washington area, where a background in meteorology can be an important asset. Students attempting this minor will need a strong background in mathematics, physics and chemistry at the level of MATH240 or MATH461, PHYS270 and PHYS271, CHEM481 (preferred), CHEM135 or CHEM131, which are prerequisites for the required courses. Students interested in taking this minor program should contact the Undergraduate Advisor in the Department of Atmospheric and Oceanic Science. This minor is not open to students who major in Atmospheric and Oceanic Sciences.

## REQUIREMENTS

A total of 15 credits is required. All courses presented for the minor must be passed with a grade of "C-" or better.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOSC123</td>
<td>Causes and Consequences of Global Change</td>
<td>3</td>
</tr>
<tr>
<td>AOSC200</td>
<td>Weather and Climate</td>
<td>3</td>
</tr>
<tr>
<td>Any AOSC 400 level course offered below as elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AOSC431</td>
<td>Atmospheric Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>AOSC433</td>
<td>Atmospheric Chemistry and Climate</td>
<td>3</td>
</tr>
<tr>
<td>AOSC434</td>
<td>Air Pollution and Environmental Justice</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two electives from the following:

Select one of the following electives:

- CHEM474 Environmental Chemistry
- GEO471 Geochemical Methods of Analysis

Other 400 level courses offered in the Department of Atmospheric and Oceanic Science on a regular basis, or from a list of non-permanent electives that will be offered by Research Scientists, regular faculty from Atmospheric and Oceanic Science, or members of the Earth System Science Interdisciplinary Center (ESSIC)

Courses offered by the Departments of Geography and Geology such as:

- GEOG472 Remote Sensing: Digital Processing and Analysis
- GEOL437 Global Climate Change: Past and Present
- GEOL452 Watershed and Wetland Hydrology

Total Credits: 18