EXPANDED COURSE DESCRIPTION
EARTH, SPACE SCIENCE AND ENGINEERING
Lassonde School of Engineering
Earth and Space Science and Engineering
LE / ESSE 1011 3.0 SECTION M
INTRODUCTION TO ATMOSPHERIC SCIENCE
FALL 2017 / WINTER 2018

Last Modified Date: 08/29/2017

COURSE CALENDAR DESCRIPTION
The origin, composition and vertical structure of the Earth's atmosphere and those of other planets. The present global atmospheric circulation. Weather systems, measurements and weather maps; atmospheric chemistry; the ozone layer and atmospheric pollution. Three lecture hours per week, five three-hour laboratory sessions. One term. Three credits. Prerequisites: 12U Calculus and vectors or 12U advanced functions and introductory calculus (pre 2007 version) or equivalent; SC/MATH 1515 3.00; 12U physics or SC/PHYS 1510 4.00. Course credit exclusions: LE/EATS 1011 3.0, LE/SC/EATS 1010 6.00, SC/NATS 1750 6.00. Prior to Fall 2009: Prerequisites: 12U Calculus and vectors or 12U advanced functions and introductory calculus (pre 2007 version) or equivalent; AS/SC/MATH 1515 3.00; 12U physics or SC/PHYS 1510 4.00. Course credit exclusions: SC/EATS1010 6.00, SC/NATS 1750 6.00.

INSTRUCTOR(S)

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<tr>
<th>Name</th>
<th>Section / Format / Term</th>
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<tr>
<td>Chen, Yongsheng</td>
<td>Sec. M / LECT / W</td>
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ADDITIONAL INFORMATION

Course Content:
1. Composition of the atmosphere.
2. Density and pressure.
3. Temperature and humidity.
5. Water in the atmosphere (condensation).
6. Stability and vertical motion
7. Clouds and precipitation.
10. Thunderstorms, tornadoes, hurricanes.
11. Air Quality.

Laboratories:
- Pressure, temperature and humidity.
- Composition and vertical structure.
- Solar flux and albedo.
- Clouds, radar and satellite images.
- Synoptic winds.

Required Text:
ACADEMIC INTEGRITY LINKS
• Senate Policy on Academic Honesty - http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/
• Academic Integrity - http://lassonde.yorku.ca/academic-integrity

STUDENT LINKS
• Student Rights and Responsibilities - http://oscr.students.uit.yorku.ca/student-conduct
• Religious Observance - https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs
• Academic Accommodation for Students with Disabilities - http://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-policy/
• Counselling and Disability Services - http://cds.info.yorku.ca/

Many courses utilize Moodle, York University's course website system. If your course is using Moodle, click here to access it.
Moodle @ York University