

EESA09H3 – Wind (L60)

Instructor: Tanzina Mohsin

Room: EV364

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Office Hours (applicable until December 1)

Tuesdays: 11:30 am to 1:30 pm (will start on September 12)

Other Times: By appointment via email

Teaching Assistants:

TBA

Lecture Time: Thursday, 6:00 pm-9:00 pm (HW216)

Course Description

A survey of the science, history and applications of wind. Topics include storms including hurricanes, tornadoes and midlatitude cyclones, global circulation, local circulations, measurement of winds, impact of winds on land surfaces, wind power, winds and pollution, historical and literary winds, and contemporary wind research. No prior knowledge of environmental science is required.

Tentative Lecture List

1. Science of WIND	Week 1
2. Global Wind Circulation	Week 2
3. Hurricanes	Week 3
4. Midlatitude Cyclones	Week 4
5. Thunderstorms and Tornadoes	Week 5
6. Reading week	Week 6
7. Midterm (tentative)	Week 7
8. Polar lows and other storms	Week 8
9. Local Wind Circulation: Thermal winds	Week 9
10. Measurement of wind	Week 10
11. Wind and Pollution	Week 11
12. Wind as a source of Power	Week 12
13. Changing wind with Climate Change	Week 13

Grading Scheme

Midterm Test: 30%

Participation (quizzes + participation assignments) =15%

Final Exam: 55%

Quizzes will be held in class at the end of each lecture starting on September 21. Each quiz will cover the materials from the same week lecture. If you miss a quiz, there is no makeup and you will miss out a participation opportunity. Participation opportunities will also be available, to a maximum of 7 marks. All participations should be submitted via blackboard. Detail of the quizzes and participations will be discussed during the lecture and will be posted on the blackboard.

Required Text

There is no text book assigned to this course. All lectures with supplementary (explanatory) materials will be posted on the course web site on the blackboard. If you are interested to learn more on the topics covered in this course you can use the following reference as an additional source.

“Understand Weather and Climate” – Edward Aguado and James E. Bert.

Midterm

October 19 or 26 (tentative) in class. Time and place (additional room) to be announced.

I expect all students (both in-class and web option students) to write the midterm exams except under the most severe and exceptional circumstances. I will not accept having a cold, a stomach ache, or headache, or something of that sort as a valid reason for not writing any midterm.

If, for some extraordinary reason, you do miss a midterm, please notify me within 24 hours of the exam in person or by email. A non-vague note from a doctor will be required on the **U of T medical form**.

Midterm and Final exam format

Same format for both exams, only differing in quantity.

1. Who is who (or, fill in the blank)
2. True or false questions and Multiple choice questions
3. Short answer questions
4. Special topics

How to study for the exams

You should consult the lecture notes (will be posted after each lecture) in addition to the lecture slides, for the exams. The major topics are elaborated in the lecture notes. In order to understand a specific topic and to describe it in detail on the exam paper the notes are very helpful. The lecture slides are guide to study the topics. However, studying only lecture notes are also not recommended because lecture slides have figures, plot, pictures and other information that are not available in the notes.

Emails

I welcome communication by email concerning the issues related to the course. However, I will delete without answering any emails asking me what is covered on the term tests or final exam, any questions regarding participations (can be found on the blackboard), which will be always available on the blackboard. In addition, I always assign office hours to pick up a term test (can be picked up only during the scheduled time posted on the blackboard). Include EESA09 in the subject line of your emails (this especially makes it easier to find your email later). **Although I provide email address to communicate on urgent matter, I encourage that you discuss your concerns/questions in person during office hours. YOU CAN ONLY USE THE EMAIL LISTED AT THE TOP OF THIS COURSE OUTLINE.**

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