EESA09H3 – Wind (L30)

Instructor: Tanzina Mohsin

Room: EV364

Email: tanzina.mohsin@utoronto.ca (please read the email policy at the end before you

send an email)

Office Hours (applicable until December 3)

Tuesdays: 11:30 am to 12:30 pm (will start on September 11, 2019)

Other time: By appointment via email

Teaching Assistants:

Andrew Zajch Benny Xie Nuha Anwer

Lecture Time: Thursday, 6:00 pm-9:00 pm (SY110)

Course Requirement

We will be using the Top Hat (<u>www.tophat.com</u>) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. Additionally, we will be using the custom-built interactive textbook **Wind** within Top Hat for this class. You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system. An email invitation will be sent to you by email. Top Hat may require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing.

Your textbook will be applied at checkout for an additional \$46. Don't worry if you don't see any content in the course right away, I will make it available to you as we progress through the semester.

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491.

Please email me at <u>tanzina.mohsin@utoronto.ca</u> if you have any question regarding the course content on Tophat.

Course Description

The course is consisting of 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 ways to look at the actions of wind in our society through various lenses. No prior knowledge of environmental science is required.

Tentative Lecture Topics (order may change)

1. Introduction	Week 1
2. Science of WIND	Week 2
3. Global Wind Circulation	Week 3
4. Hurricanes	Week 4
5. Midlatitude Cyclones	Week 5
6. Reading week	Week 6
7. Thunderstorms and Tornadoes	Week 7
8. Midterm (tentative)	Week 7/8
9. Fire Storm, Dust Storm and Polar Lows	Week 9
10. Local Wind Circulation: Thermal winds	Week 10
11. Measurement of wind	Week 11
12. Wind and Pollution	Week 12
13. Wind as a source of Power	Week 13
14. Changing wind with Climate Change	Week 14

Grading Scheme

Midterm Test - 30% Participation (quizzes + assignments) - 13% Tophat participation - 7% Final Exam - 50%

Quizzes will be held in class at the end of each lecture starting on September 12 for inclass lecture. 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 5 marks. All participations can be submitted via Quercus/Tophat. Detail of the quizzes and participations will be discussed during the lecture and will be posted on the Quercus.

Midterm

Week of October 14 or 21 (tentative). Time and place (additional room) to be announced. *I expect all students to write the midterm exam 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

The format for both exams is the same, 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/videos

How to study for the exams

You must study the book chapters available through Tophat in addition to the lecture slides, for the tests and exams. The major topics are elaborated in the chapters. In order to understand a specific topic and to describe it in detail on the exam paper these are very helpful. The lecture slides are guide to study the topics. However, studying only the chapters of the text book (on Tophat) are also not recommended because the lecture slides have figures, plot, pictures and other information that are not available in the chapters. PLEASE NOTE THAT THE VIDEOS THAT ARE USED DURING LECTURE OR USED FOR PARTICIPATION OUTSIDE OF LECTURE ARE IMPORTANT FOR MIDTERM AND FINAL EXAM.

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 (all can be found in the syllabus or on the Quercus), which will be always available on the Quercus. 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 Quercus). 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.

Copyright statement

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