

# Physical Distribution and Transportation AP/ADMS 3360 Fall 2023

## **Course Information**

Course Instructor: Rongbing Huang Course Time & Days: Thursday 7–10PM

E-mail: rhuang@yorku.ca Class Location: RS 205

Phone: 22898

Office Hours: Zoom by appointment. Course website: eClass

#### **Course Overview**

## **Course Format/Delivery Method**

Most course material will be uploaded to eClass in asynchronous format on a weekly basis. However, since this course is a blended (BLEN) course, some lectures will be delivered face-to-face on campus. In-person classes are highlighted in the course schedule on pages 4 and 5 below. Attending in-person lectures are mandatory.

## **Course Description and Learning Objectives**

The purpose of this course is to describe the role of physical distribution and transportation in business and the impact these factors can have on market share and profitability in a competitive marketplace. The learning objectives are to:

- 1 Define logistics and understand its role and importance
- 2 Understand the interaction of logistics with other business functions
- 3 Learn the management and decisions of logistics functions including demand management, inventory management, transportation, warehousing and network design.
- 4 Understand logistics strategic planning and challenges.

#### **Course Evaluation**

Assessment	Due Date	Weight %	Course Learning Outcome
Assignment I	Oct. 5	15%	
Assignment II	Nov. 2	15%	
Assignment III	Nov. 30	15%	
Participation	Dec. 7	5%	
Final Exam	ТВА	50%	
		100%	

## **Submitting Assignments**

- 1. Please be advised that Assignments are due on the day and time designated at the **BEGINNING** of classes. Late assignments will **NOT** be accepted and no extensions will be granted.
- 2. Assignments must be **TYPED** (except for graphs). **NON\_TYPED** Assignments will **NOT** be accepted.
- 3. Assignments must be done on an individual basis. Cheating will result in zero for all involved students.

#### Missed Tests and Exams

**Deferred Final Exams:** Deferred standing may be granted to students who are unable to write their final examination at the scheduled time or to submit their outstanding course work on the last day of classes. Students are not required to submit a doctor's note or an Attending Physician's Statement in support of requests for deferred standing for courses impacted by the COVID-19 situation. Details can be found at <a href="http://myacademicrecord.students.yorku.ca/deferred-standing">http://myacademicrecord.students.yorku.ca/deferred-standing</a>

DSA Form: <a href="http://www.registrar.yorku.ca/pdf/deferred\_standing\_agreement.pdf">http://www.registrar.yorku.ca/pdf/deferred\_standing\_agreement.pdf</a>

In order to apply for deferred standing, students must register at:

### http://sas-app.laps.yorku.ca

Followed by handing in a completed original Deferred Standing Agreement (DSA) form and supporting documentation directly to the main office of the School of Administrative Studies (282 Atkinson) and add your ticket number to the DSA form. During this time of remote learning, you will be required to submit the forms via email to <a href="mailto:apsas@yorku.ca">apsas@yorku.ca</a>. The DSA and supporting documentation must be submitted no later than five (5) business days from the date of the exam. These requests will be considered on their merit and decisions will be made available by logging into the above-mentioned link. No individualized communication will be sent by the School to the students (no letter or e-mails).

Students with approved DSA will be able to write their deferred examination during the School's deferred examination period. **Deferred exams might take place during the regular exams period or in subsequent weeks depending on the course**; precise dates are known when the Office of the Registrar publishes the final exam schedule of the term. No further extensions of deferred exams shall be granted. The format and covered content of the deferred examination may be different from that of the originally scheduled examination. The deferred exam may be closed book, cumulative and comprehensive and may include all subjects/topics of the textbook whether they have been covered in class or not.

## Grading

The grading scheme for this course conforms to the 9-point system used in undergraduate programs at York University. For a full description of the York grading system, visit the York University Academic Calendar.

GRADE	GRADE POINT	PERCENT RANGE	DESCRIPTION
A+	9	90-100	Exceptional
А	8	80-89	Excellent
B+	7	75-79	Very Good
В	6	70-74	Good
C+	5	65-69	Competent
С	4	60-64	Fairly Competent
D+	3	55-59	Passing
D	2	50-54	Marginally Passing
E	1	(marginally below 50%)	Marginally Failing
F	0	(below 50%)	Failing

# Course Schedule: Weekly Readings and Activities

## **Required Course Materials**

Bartholdi, J.J. III; Hackman, S.T. (2019): Warehouse & Distribution Science, Release 0.98.1. <a href="http://www.warehouse-science.com/book">http://www.warehouse-science.com/book</a>.

## **Course Schedule**

Lecture	Date	Topic	Chapter
1	Sept.07	Warehouse Operations and Layout	Bartholdi, Ch. 1,2,3&6
2	Sept.14	Warehouse Operations and Layout	Bartholdi, Ch. 1,2,3&6
3	Sept.21	Introduction to Python	Slides
4	Sept.28	Introduction to Python	Slides
5	Oct. 05	Measuring Warehouse Performance	Bartholdi, Ch.14&15
	Oct. 12	No Class	Reading Week
6	Oct. 19	Probability and statistics review (Binomial, Poisson, Normal, Loss function)	Slides
7	Oct.26	Airlines & Revenue Management	Slides
8	Nov. 02	Motor Carriers, Transportation & Transshipment problems	Slides
9	Nov. 09	Waiting Line	Slides

10	Nov. 16	Dynamic Programming and Shortest Path	Slides
11	Nov. 23	Bin Packing & TSP	Slides
12	Nov. 30	VRP, 3PL & Combinatorial Auction	Slides

### **Course Policies**

All students are expected to familiarize themselves with the following information:

- Student Rights & Responsibilities
- Academic Accommodation for Students with Disabilities

## Please also review the following course policies:

## **Academic Integrity**

In this course, we strive to maintain academic honesty to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing <a href="SPARK's Academic Integrity module">SPARK's Academic Integrity module</a> at the beginning of the course. Breaches of academic honesty range from cheating to plagiarism (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.). All instances of academic dishonesty in this course will be reported to the appropriate University authorities and can be punishable according to the <a href="Senate Policy on Academic Honesty">Senate Policy on Academic Honesty</a>.

## **Accessibility**

While all individuals are expected to satisfy the requirements of their program of study and to aspire to achieve excellence, the University recognizes that persons with disabilities may require reasonable accommodation to enable them to perform at their best. The University encourages students with disabilities to register with <a href="Student Accessibility Services">Student Accessibility Services</a> to discuss their accommodation needs as early as possible in the term to establish the recommended academic accommodations that will be communicated to Course Directors through their Letter of Accommodation (LOA).

Please let your instructor know as early as possible in the term if you anticipate requiring academic accommodation so that we can discuss how to consider your accommodation needs within the context of this course. Sufficient notice is needed so that reasonable steps for accommodation can be discussed. Accommodations for

tests/exams normally require three (3) weeks (or 21 days) before the scheduled test/exam to arrange.

## **Religious Observance Accommodation**

York University is committed to respecting the religious beliefs and practices of all members of the community, and making reasonable and appropriate <u>accommodations</u> to adherents for observances of special significance. Should any of the dates specified in this syllabus for course examinations, tests, or deadlines conflict with a date of religious significance, please contact the instructor within the first three (3) weeks of class. If the date falls within the formal examination periods, you must complete and submit a <u>Religious Accommodation for Examination Form</u> at least three (3) weeks before the start of the exam period.

## **Intellectual Property**

Course materials are designed for use as part of this particular course at York University and are the intellectual property of the instructor unless otherwise stated. Third-party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian copyright law. Students may not publish, post on an Internet site, sell, or otherwise distribute any course materials or work without the instructor's express permission. Course materials should only be used by students enrolled in this course.

Copying this material for distribution (e.g., uploading material to a commercial third-party website) may lead to a charge of misconduct according to York's <u>Code of Student Rights and Responsibilities</u>, the <u>Senate Policy on Academic Honesty</u>, and/or legal consequences for copyright violations.

## Student Conduct in the Learning Environment

York University is committed to fostering teaching and learning environments that are free of disruptive and/or harassing behaviour, are physically safe, and conducive to effective teaching and learning. Students and instructors are expected to maintain a professional relationship characterized by courtesy, civility, and mutual respect and to refrain from actions disruptive to such a relationship. Individuals who fail to adhere to such standards and who violate University or public law may be subject to disciplinary action by the University.

For more information, see the policies on <u>Disruptive and/or Harassing Behaviour in Academic Situations</u>, the <u>Student Conduct and Responsibilities</u>, and the <u>Code of Student Rights & Responsibilities</u>.

## Student Notice of Recording for Online Teaching and Learning

Activities for this course involve recording, in partial fulfillment of the course learning outcomes. Images, audio, text/chat messaging that have been recorded may be used and/or made available by the University to students enrolled in the course and those supporting the course for the purpose of materials review, for assessment, etc. Recordings will be managed according to the University's Common Record Schedule and will be securely destroyed when no longer needed by the University. Your personal information is protected in accordance with York University's <u>Guidelines on Access of Information and Protection of Privacy</u> and the <u>Freedom of Information and Protection of Privacy Act</u>. Access to online materials, including recordings or live meetings, is subject to York University's <u>Senate Policy on Computing and Information Technology Facilities</u>.

The University will use reasonable means to protect the security and confidentiality of the recorded information, but cannot provide a guarantee of such due to factors beyond the University's control, such as recordings being forwarded, copied, intercepted, circulated, disclosed, or stored without the University's knowledge or permission, or the introduction of malware into computer system which could potentially damage or disrupt the computer, networks, and security settings. The University is not responsible for connectivity/technical difficulties or loss of data associated with your hardware, software, or Internet connection.

By engaging in course activities that involve recording, you are consenting to the use of your appearance, image, text/chat messaging, and voice and/or likeness in the manner and under the conditions specified herein. In the case of a live stream recording, if you choose not to have your image or audio recorded, you may disable the audio and video functionality. If you choose to participate using a pseudonym instead of your real name, you must disclose the pseudonym to your instructor in advance to facilitate class participation.

You are not permitted to disclose the link to/URL of an event or an event session recording or copies of recording to anyone, for any reason. Recordings are available only to authorized individuals who have been directly provided the above instructions/link for their use. Recordings for personal use, required to facilitate your learning and preparation of personal course/lecture notes, may not be shared with others without the permission of the instructor or event coordinator, and may not be published, posted, linked to, or otherwise made available online, including on social media feeds, even if those feeds are private.

## **Health and Safety**

All York students and instructors share responsibility for the safety and well-being of the community while on York's campuses. Please continue to check <u>YUBetter Together</u> for the latest information on health and safety.

## **Student Support and Resources**

To help you succeed academically, York University offers a wide range of resources and services. Everything from writing workshops and peer mentorship to wellness support and career guidance is available to fulfill our LA&PS students' needs. Explore the links below to access these on-campus resources:

- Academic Advising is available to provide students support and guidance in making academic decisions and goals.
- <u>Student Accessibility Services</u> are available for support and accessibility accommodation when required.
- <u>Student Counselling, Health & Wellbeing</u> offers workshops, resources, and counselling to support your academic success.
- <u>Peer-Assisted Study Sessions (PASS) Program</u> provides student study sessions for students to collaborate and enhance their understanding of course content in certain courses.
- <u>Student Numeracy Assistance Centre at Keele (SNACK)</u> supports students in courses involving math, stats, and Excel.
- <u>The Writing Centre</u> provides multiple avenues of writing-based support including drop-in sessions, one-to-one appointments, a Multilingual Studio, and an Accessibility Specialist.
- <u>ESL Open Learning Centre (OLC)</u> supports students with building proficiency in reading, writing, and speaking English.
- <u>Learning Skills Services</u> provides tips for time management, effective study and learning habits, keeping up with coursework, and other learning-related supports.
- <u>Learning Commons</u> provides links to supports for time management, writing, study skills, preparing for exams, and other learning-related resources.
- Roadmap to Student Success provides students with timely and targeted resources to help them achieve academic, personal, and professional success.
- Office of Student Community Relations (OSCR) is responsible for administering the Code of Student Rights & Responsibilities and provides critical incident support.
- goSAFE is staffed by York students and can accompany York community
  members to and from any on-campus location, such as the Village Shuttle pickup hub, parking lots, bus stops, or residences.

For a full list of academic, wellness, and campus resources visit  $\underline{\text{Student Support \& Resources}}.$