## **Introduction to Enterprise Resource Planning Applications**

## ADMS 3502 – Section A Fall 2023

#### **Course Information**

Course Director: Dr. Cristóbal Sánchez-

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Phone: 416 7362100, extension 22893 Office Hours and Location: Mondays 1pm by Zoom (see eClass for link) and

by appointment.

Course Time & Days: Wednesdays,

4.00pm to 7.00pm,

Class Location: Ross South 203

Course eClass site: <a href="https://eclass.yorku.ca/">https://eclass.yorku.ca/</a>

## **Course Overview**

## **Course Description and Prerequisites**

Explains and demonstrates how Enterprise Resource Planning (ERP) Systems, a group of integrated software modules, run virtually all business processes in an organization. ERP Systems include modules such as management accounting, sales, logistics, production/materials management, procurement, and human resources. Prerequisites: AP/ADMS 2511 3.00 or AP/ITEC 1010 3.00. Course credit exclusions: None.

# **Course Learning Objectives**

By the end of this course, students will be able to:

- 1. Understand the fundamental concepts and issues of ERP systems.
- 2. Describe the key integration points between key functional areas of procurement, production, sales and marketing, and accounting.
- 3. Analyze business transaction data across multiple business processes to make effective decisions.
- 4. Perform business transactions using SAP ERP in procurement, production, sales and marketing, and accounting.
- 5. Work as part of a business team.
- 6. Communicate using the key terminology related to enterprise resource planning systems and business process integration.
- 7. Research for additional information about ERP systems and business process integration.

## **Course Format and Organization**

This course is to be in-person. The time in class will be divided between lecture time, student presentations, teamwork activities using SAP ERP simulation game. Student participation and involvement is a key part of the course, and weekly lecture attendance is expected.

# **Technical Requirements**

Students will be required to bring their laptops to every class.

## **Course Expectations**

- Students should read the assigned readings prior to coming to class.
- Attendance to weekly lectures is expected and part of the course evaluation.
- On average a student may need between 3 to 5 hours each week to prepare for class and complete the assigned homework.
- Teamwork is an important component of this class. Students are expected to make a fair contribution to their teams.

## **Course Evaluation**

Assessment*	Weight %	Туре	Course Learning Outcome
Research Article Presentation	10%	Group	1, 6, 5, 7
Research Article Critique	5%	Group	1, 6, 5, 7
ERPsim Intro Manufacturing Game Presentation	10%	Group	2, 3, 4, 5, 6
ERPsim Extended Manufacturing Game Presentation	15%	Group	2, 3, 4, 5, 6
Flya Kite exercises (3 x 5%)	15%	Individual	2, 4
Weekly attendance (includes ERPsim simulations and Research Article presentations)	10%	Individual	4, 5, 6
Midterm	15%	Individual	1, 2, 6
Final examination (during the examination period, TBA)	20%	Individual	1, 2, 6
TOTAL	100%		

Bonus marks			
ERPsim cash to cash exercise	1%	Group	2, 4, 5
Flya Kite Exercises #4: Flya Kite Exercises Textbook: Chapter 5: Financial Accounting and Controlling (FI and CO).	2%	Individual	2, 4

<sup>\*</sup>For due date see Course Schedule

## **Course Schedule: Weekly Readings and Activities**

## **Required Course Materials**

### **ERPsim Reading and Exercises Material:**

To access the ERPsim materials students will need to purchase an access code through the course website. Cost: CAD \$57.

https://erpsim.hec.ca/apps/register/?event=14141&gi=0D4166

Léger, P.-M., Robert, J., Babin, G., Derick, L., Pellerin, R., and Wagner, B. (2021). Participants' Guide: Manufacturing Game, ERPsim Lab, HEC Montréal. Léger, P.-M., Pellerin, R. et Babin, G. (2011). Readings on Enterprise Resource Planning, ERPsim Lab, HEC Montréal.

#### Flya Kite Reading and Exercises Material (available through eClass):

Quarles, R., Noman. F., (2021). Flya Kite Fully Integrated Case Student Text (MM, PP, SD, FI/CO, HR); Version 9.0, SAP University Alliance Curriculum. (Flya Kite Textbok) Quarles, R., Noman. F., (2021). Flya Kite Fully Integrated Case Student Exercises (MM, PP, SD, FI/CO, HR); Version 9.0, SAP University Alliance Curriculum. (Flya Kite Exercises Textbook).

#### Course Schedule

## Session 1, September 6

- Course overview and resources.
- Introduction to the Flya Kite Case company.
- Introduction to the ERPsim Introduction Manufacturing Game.
- Importance and Impact of ERP Systems on Industry and Organization.

#### Readings:

- Flya Kite Textbook: Chapter 1: Introduction (Flya Kite)
- o Participant's Guide Manufacturing Game. Pages 7 to 35. (ERPsim)

 Readings on Enterprise Resource Planning: Chapter 1: Importance and Impact of ERP Systems on Industry and Organization. (ERPsim)

#### Required:

✓ Attendance required.

## Session 2, September 13

- ERPsim Introductory Manufacturing Game: Round 1 and 2 Sales and Marketing -Production.
- Reports: Sales and Marketing; Logistics, Accounting, Production. (ERPsim)
- Why do Companies Implement ERP Systems?
- Process for Selecting an ERP System.

#### Readings:

- Participant's Guide Manufacturing Game. Pages 36 to 42, pages 70-77 and 89-90.
  (ERPsim)
- o Participant's Guide Manufacturing Game. Pages 42-45 and 79-81. (ERPsim)
- Readings on Enterprise Resource Planning: Chapter 2: Why do Companies Implement ERP Systems? (ERPsim)
- Readings on Enterprise Resource Planning: Chapter 3: Process for Selecting an ERP System. (ERPsim)

## Required:

- ✓ ERPsim Intro Manufacturing Game: Play Round 1 and 2. (During class; attendance required)
- ✓ Presentation: (Team A): Chapter 2: Why do Companies Implement ERP Systems? (ERPsim) (article critique Team G)
- ✓ Presentation: (Team B): Chapter 3: Process for Selecting an ERP System. (article critique Team H)

# Session 3, September 20

- ERPsim Introductory Manufacturing Game: Round 3 and 4 Planning and Procurement.
- ERPsim Reports: Planning and Procurement.
- ERP Implementation Methodologies and Strategies
- Critical success factors for ERP system selection, implementation and postimplementation.

## Readings:

- o Participant's Guide Manufacturing Game. Pages 46-50 and 83-88. (ERPsim)
- Readings on Enterprise Resource Planning: Chapter 4: ERP Implementation Methodologies and Strategies. (ERPsim)
- Readings on Enterprise Resource Planning: Chapter 5: Critical success factors for ERP system selection, implementation and post-implementation.

## Required:

✓ ERPsim Intro Manufacturing Game: Play Round 3 and 4. (During class; attendance required)

- ✓ Presentation: (Team C): Chapter 4: ERP Implementation Methodologies and Strategies. (article critique Team I)
- ✓ Presentation: (Team D). Chapter 5: Critical success factors for ERP system selection, implementation and post-implementation (article critique Team J).

## Session 4, September 27

- ERPsim Intro Manufacturing Game Day.
- ERPsim game day presentation overview.
- ERPsim Data analytics.

#### Readings:

o Participant's Guide Manufacturing Game. Pages 1-50, pages 70-90.

#### Reauired:

- ✓ ERPsim Intro Manufacturing Game: Game day. (During class; attendance required)
- ✓ ERPsim Intro Manufacturing Game Presentation (Due October 4, 4:00pm).

## Session 5, October 4

- ERPsim Intro Manufacturing Game Presentations. (ERPsim)
- Materials Management (MM) / Procurement Process. (Flya Kite)
- Cash-to-cash exercise. (ERPsim) (Bonus mark)
- Midterm review.

#### Readings:

o Flya Kite Textbook: Chapter 2 Procurement Logistics (MM). (Flya Kite)

#### Required:

- ✓ ERPsim Introduction Manufacturing Game Presentation. Delivered in-class and submitted on eClass (Due October 4, 4:00 pm). One submission per Group.
- ✓ Flya Kite Exercises #1: Flya Kite Exercises Textbook, Chapter 2 Procurement Logistics (MM) (Due October 24, 11:30pm)
- ✓ ERPsim cash-to-cash exercise (*Bonus mark*) (Due October 24, 11:30 p.m.)

## Reading week, October 7-13

#### Session 6, October 18

Midterm exam

The exam covers all the materials from:

- Participant's Guide Manufacturing Game. Pages 1-50, pages 70-90.
- ERPsim Website: ERPsim readings discussed in class: Chapters 1, 2, 3, 4, and 5.

The exam will consist of a mix of multiple choice questions and open-ended questions.

#### Session 7, October 25

- ERPsim Extended Manufacturing Game: Rounds 1 and 2.
- Tailoring of ERP Systems.
- ERP system architecture.

#### Readings:

- o Participant's Guide Manufacturing Game, (ERPsim Website). Pages 51 to 60.
- o Readings on Enterprise Resource Planning: Chapter 6: Tailoring of ERP Systems.
- o Readings on Enterprise Resource Planning: Chapter 8: ERP system architecture.

#### Required:

- ✓ ERPsim Extended Manufacturing Game: Play Round 1 and 2. (During class; attendance required)
- ✓ Presentation: (Team E): Chapter 6: Tailoring of ERP Systems. (article critique Team K)
- ✓ Presentation (Team F): Chapter 8: ERP system architecture. (article critique Team A).

## Session 8, November 1

- ERPsim Extended Manufacturing Game: Rounds 3 and 4.
- Analyzing data from rounds 1 to 2.
- Change Management.
- Individual User Adaptation to ERP.

#### Readings:

- o Participant's Guide Manufacturing Game, (ERPsim Website). Pages 51 to 60.
- o Readings on Enterprise Resource Planning: Chapter 11: Change Management.
- Readings on Enterprise Resource Planning: Chapter 13: Individual User Adaptation to ERP.

#### Required:

- ✓ ERPsim Extended Manufacturing Game: Play Round 3 and 4. (During class; attendance required)
- ✓ Presentation (Team G): Chapter 11: Change Management (article critique Team B).
- ✓ Presentation (Team H) Chapter 13: Individual User Adaptation to ERP. (article critique Team C)

### Session 9, November 8

• ERPsim Extended Manufacturing Game. Competition Day.

#### Readings:

o Participant's Guide Manufacturing Game. Pages 51 – 60.

#### Required:

- ✓ Extended Manufacturing Game: Competition Day. (Attendance required).
- ✓ ERPsim Extended Manufacturing Game Presentation. Delivered in-class and submitted on eClass (Due November 15, 4:00 pm). One submission per Group.

## Session 10, November 15

• ERPsim Competition Day - Student Presentations

### Required:

✓ ERPsim Extended Manufacturing Game Presentation. Delivered in-class and submitted on eClass (Due November 15, 4:00 pm). One submission per Group.

### Session 11, November 22

- Production Planning and Execution (PP) Production Process. (Flya Kite)
- ERP-Related Careers
- Enhancing Decision Making through Performance Dashboards and Scorecards

### Readings:

- o Flya Kite Textbook: Chapter 3 Production Logistics (PP). (Flya Kite)
- o Readings on Enterprise Resource Planning: Chapter 14: ERP-Related Careers.
- Readings on Enterprise Resource Planning: Chapter 17: Enhancing Decision Making through Performance Dashboards and Scorecards.

#### Required:

- ✓ Presentation (Team I) Chapter 14: Chapter 14: ERP-Related Careers. (article critique Team D)
- ✓ Presentation (Team J) Chapter 17: Enhancing Decision Making through Performance Dashboards and Scorecards. (article critique Team E)
- ✓ Flya Kite Exercises #2: Flya Kite Exercises Textbook, Chapter 3: Production Logistics (PP) (Due November 28, 11:30 pm).

## Session 12, November 29

- Sales and Distribution (SD) Process. (Flya Kite)
- Financial Accounting and Controlling (FI and CO) (Flya Kite)
- Competition Day report update
- ERP and Corporate Control
- Cloud Computing, Software as a Service & Next Generation ERP

### Readings:

- o Flya Kite Textbook: Chapter 4 Sales Logistics (SD). (Flya Kite)
- Flya Kite Textbook: Chapter 5: Financial Accounting and Controlling (FI and CO).
  (Flya Kite)
- Readings on Enterprise Resource Planning: Chapter 19: ERP and Corporate Control.

#### Required:

- ✓ Presentation (Group K) Chapter 19: Chapter 19: ERP and Corporate Control. (article critique Team F)
- ✓ Flya Kite Exercise #3: Flya Kite Exercises Textbook: Chapter 4: Sales Logistics (SD) (due December 5, 11:30pm).
- ✓ Flya Kite Exercises #4: Flya Kite Exercises Textbook: Chapter 5: Financial Accounting and Controlling (Fl and CO). (Due December 5, 11:30 p.m.) (Bonus marks)

### Session 13, Final exam

The details of the final exam will be release towards the end of the course, approximately during Session 11.

### Research articles assignments to groups

Students will be placed into groups at the beginning of the semester and each group will be expected to deliver a 10-minute presentation on an article assigned by the instructor and to lead the discussion in class. Presentations will be evaluated based on the organization, content, additional research, visual aids, questions, and class engagement.

#### Late submission:

There will be a deduction of 30% from the total assignment for each day late.

## **Weekly Attendance:**

- ✓ Weekly attendance consists of 10% of the final grade.
- ✓ Attendance is required for the entire class (3 hours). There will be no part-marks for attending half of a lecture or part thereof.
- ✓ Students are allowed to miss one lecture without any penalty.
- ✓ There will be no make-up for missed lecture.

### RELEVANT UNIVERSITY REGULATIONS

#### **Waived requirement for Attending Physician Statements**

Attending Physician Statements are not required as supporting documentation for students requesting deferred standing, petitions and appeals this fall. <u>Senate</u> approved extending the waiver of required Attending Physician Statements to December 31, 2023.

#### Explicit Course Policy on Student Use of Generative Artificial Intelligence (AI)

Students may only use generative artificial intelligence (AI) tools in this course so long as the following two conditions are met:

- Specific generative AI tools are used in accordance with the written guidelines provided for each assessment or activity, and
- The use of generative AI is documented and cited following citation instructions given in the syllabus.

Use of generative AI outside these two conditions will constitute academic dishonesty under York University's <u>Senate Policy on Academic Honesty</u>. As a student in this course, it is your responsibility to understand when and how generative AI tools can be used to complete your assessments and activities. If you do not know whether an online resource or tool can be used in this course, please contact your instructor for guidance.

### **Academic Integrity**

As a student at York University, you have a responsibility to both understand and uphold the integrity of the academic experience. The Faculty of Liberal Arts & Professional Studies supports the International Center for Academic Integrity's <u>definition of academic integrity</u>. That is, you will be committed to acting in all academic matters, even in the face of adversity, with honesty, trust, fairness, courage, respect, and responsibility. Here is how you can demonstrate academic integrity in the completion of this course:

- Respect the ideas of others: Your course work should represent your own knowledge and ideas. You should not falsely claim credit for ideas that are not your own, by presenting another's work as yours. If you are quoting, paraphrasing, or summarizing another person's work in order to support your own ideas, identify the work and the author through proper citation practices. For more information about how to cite properly, use the <a href="Student Papers and Academic Research Kit">Student Papers and Academic Research Kit</a> (SPARK). You can improve your writing, research, and personal learning abilities through the <a href="Learning Commons">Learning Commons</a>, or by visiting the <a href="Writing Centre">Writing</a> Centre or <a href="ESL Open Learning Centre">ESL Open Learning Centre</a>.
- Respect your peers: Know when you are allowed to collaborate. Ask your instructor about what group work entails when it comes to the sharing of work. In test situations and assignments, don't steal or give answers to your peers, whether in-person or online (e.g., in group chats and/or on third-party content-sharing websites, such as Chegg, Course Hero, etc.). Both cheating and aiding in a breach of academic honesty are violations of York University's academic honesty policy.
- Respect your course instructor(s): Understand what your instructors are asking of you in class, as well as on assignments, tests and/or exams. If you are unsure, ask your professor or teaching assistant. They are committed to making you feel supported and want to assess you fairly and with integrity. Please do not submit the same piece of work for more than one course without your instructor's permission. That can be considered an act of cheating.
- Respect yourself: When you act with integrity, you know that your work is yours and yours alone. You do not allow others to take tests for you. You do not buy or otherwise obtain term papers or assignments. You do the work. As a result, you know that you earned the grades that you receive, so you can be proud of your York degree. By acting with integrity in your course work, you are also practising a valuable professional skill that is important in all workplaces.
- Take responsibility: If you have acted in an academically dishonest way, you can demonstrate courage and take responsibility for your mistake. You can admit your mistake to your course instructor as soon as possible.

Students who engage in academic dishonesty can be subject to disciplinary action under the <u>Senate Policy on Academic Honesty</u>. Your lack of familiarity with the Senate Policy does not constitute a defense against its application. Some academic offences can also constitute offences under the <u>Criminal Code of Canada</u>, which means that you may also be subject to criminal charges.

**Deferred 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. Details can be found at http://myacademicrecord.students.yorku.ca/deferred-standing

In order to apply for deferred standing, students must register at https://www.yorku.ca/laps/sas/academic-resources/deferred-exam-requests/

**Reappraisals:** Students may, with sufficient academic grounds, request that a final grade in a course be reappraised (which may mean the review of specific pieces of tangible work). Non-academic grounds are not relevant for grade reappraisals; in such cases, students are advised to petition to their home Faculty. Students are normally expected to first contact the course director to discuss the grade received and to request that their tangible work be reviewed. Tangible work may include written, graphic, digitized, modeled, video recording or audio recording formats, but not oral work. Students need to be aware that a request for a grade reappraisal may result in the original grade being raised, lowered or confirmed. For reappraisal procedures and information, please visit the Office of the Registrar site at: http://myacademicrecord.students.yorku.ca/grade-reappraisal-policy

#### 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 <u>Student Accessibility Services</u> 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 accommodations 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 Religious Accommodation for Examination Form 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</u> <u>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> and <u>Student Conduct and Responsibilities</u>, as well as the <u>Code of Student Rights & Responsibilities</u>.

Effective Date: September 6, 2023