

SCMT2501

Inventory and Materials Management Winter 2025 - Current

Last Updated: 12/6/2024 12:32:00 PM

Care has been taken to obtain copyright permission to reproduce this material. Any information that will enable Bow Valley College to obtain copyright clearance for any material not acknowledged would gladly be received by:

Bow Valley College 345 6th Avenue SE Calgary AB T2G 4V1 Attn: Copyright Officer email: <u>copyright@bowvalleycollege.ca</u>

© Bow Valley College



SCMT2501 Inventory and Materials Management

COURSE DESCRIPTION

For many organizations, inventory is one of the largest assets on the balance sheet. Minimizing inventory frees up money for use elsewhere in the organization. Materials management addresses techniques to manage inventory to allow processes or entities in the supply chain to operate interdependently and efficiently. This course addresses inventory from a financial, physical, forecasting, and operational standpoint.

| | Complete the following courses: | | |
|---------------|--|--|--|
| REQUISITES | • SCMT2101 - Introduction to Supply Chain Management (3) | | |
| EQUIVALENTS | None | | |
| CREDITS | 3 | | |
| HOURS | 45 | | |
| ELIGIBLE FOR | Yes | | |
| PLAR | 165 | | |
| ZERO TEXTBOOK | No | | |
| COST | | | |

COURSE LEARNING OUTCOMES

Bow Valley College is committed to ensuring our graduates can demonstrate their abilities in key areas that will make them effective citizens and encourage their development as lifelong learners. In addition to the discipline-specific skills that learners acquire in their programs, the College has identified ten learning outcomes.

College-Wide Outcomes:

- 1. Communication
- 2. Thinking Skills
- 3. Numeracy and Financial Literacy
- 4. Working with Others
- 5. Digital Literacy
- 6. Positive Attitudes and Behaviours
- 7. Continuous Learning
- 8. Health and Wellness Awareness
- 9. Citizenship and Intercultural Competence
- 10. Environmental Sustainability



| # | COURSE LEARNING OUTCOME(S) | COLLEGE WIDE OUTCOMES SUPPORTED |
|---|--|---|
| 1 | Estimate the forecast using qualitative and | Thinking Skills (2), Numeracy and Financial |
| | quantitative forecasting models | Literacy (3), Digital Literacy (5) |
| 2 | Evaluate required versus available production | Thinking Skills (2), Numeracy and Financial |
| | capacity | Literacy (3), Digital Literacy (5) |
| 3 | Develop an aggregate plan for future | Thinking Skills (2), Numeracy and Financial |
| | production | Literacy (3), Digital Literacy (5) |
| 4 | Apply a variety of inventory control models to | Thinking Skills (2), Numeracy and Financial |
| | manage inventory | Literacy (3), Digital Literacy (5) |
| 5 | Develop a material requirements plan | Thinking Skills (2), Numeracy and Financial |
| | Develop a material requirements plan | Literacy (3), Digital Literacy (5) |
| 6 | Describe just in time and lean energians | Communication (1), Thinking Skills (2), |
| 6 | Describe just-in-time and lean operations | Environmental Sustainability (10) |
| | Calculate inventory and waiting lines using | Thinking Skills (2), Numeracy and Financial |
| 7 | simulations | Literacy (3), Digital Literacy (5) |

COURSE MODULES AND SCHEDULE

*Course schedule subject to change, depending on delivery mode and term of study. For exact dates, please consult the Course Offering Information in Brightspace.

| / | | |
|---------|--|--|
| Week 1 | Module 1: Forecasting | |
| Week 2 | Module 1: Forecasting | |
| Week 3 | Module 2: Capacity and Constraint Management | |
| Week 4 | Module 2: Capacity and Constraint Management | |
| Week 5 | Module 3: Aggregate Planning and Sales and Operations Planning | |
| Week 6 | Module 3: Aggregate Planning and Sales and Operations Planning | |
| Week 7 | Module 4: Inventory Management | |
| Week 8 | Module 4: Inventory Management | |
| Week 9 | Reading Week | |
| Week 10 | Module 4: Inventory Management | |
| Week 11 | Module 5: Material Requirements Planning (MRP) and ERP | |
| Week 12 | Module 5: Material Requirements Planning (MRP) and ERP | |
| Week 13 | Module 6: Lean Operations | |
| Week 14 | Module 7: Business Analytics Module F Simulation | |
| Week 15 | Exam Week | |
| Week 14 | Yeek 14 Module 7: Business Analytics Module F Simulation | |



ASSESSMENT

| COURSE | | |
|-------------------|------------------------|--------|
| LEARNING | ASSESSMENT | WEIGHT |
| OUTCOME(S) | | |
| 1, 2, 3, 4, 5 | Quizzes | 30% |
| 2, 3, 4, 5, 6, 7 | Individual Assignments | 30% |
| 1, 4 | Group Assignments | 10% |
| 1, 2, 3, 4, 5, 6, | Exam | 30% |
| 7 | | 30% |

Important: For details on each assignment and exam, please see the Course Offering Information.

PERFORMANCE STANDARDS

A minimum grade of D is required to pass this course. However, a program may require a higher grade in this course to progress in the program or to meet specific program completion requirements.

Please consult with the program area or contact the program chair for further details. A minimum Grade Point Average of 2.0 is required for graduation.

GRADING SCHEME



| Grade | Percentage | Grade Point | Description |
|-------|--------------|----------------|---|
| A+ | 95-100 | 4.0 | Exceptional: superior knowledge of subject matter |
| А | 90-94 | 4.0 | Excellent: outstanding knowledge of subject matter |
| A- | 85-89 | 3.67 | |
| B+ | 80-84 | 3.33 | |
| В | 75-79 | 3.0 | Very Good: knowledge of subject matter generally mastered |
| B- | 70-74 | 2.67 | |
| C+ | 67-69 | 2.33 | |
| С | 64-66 | 2.0 | Satisfactory/Acceptable: knowledge of subject matter adequately mastered |
| C- | 60-63 | 1.67 | |
| D+ | 57-59 | 1.33 | |
| D | 50-56 | 1.0 | Minimal Pass |
| F | Less than 50 | 0.0 | Fail: an unsatisfactory performance |

REQUIRED LEARNING RESOURCES

Heizer, J., Render, B., Munson, C. & Griffin, P. (2023). *Operations management: sustainability and supply chain management (4th Canadian edition)*

Pearson Canada Inc., Toronto, Ontario

E-text with MyLab access ISBN: 9780137318957

Additional learning resources may be found in the Course Offering Information or in Brightspace.





Supply Chain Canada AB will accredit BVC Business Administration Diploma (Supply Chain Management Major) program. This accreditation entitles BVC Business Administration Diploma (Supply Chain Management Major) program graduates who achieved a grade of B or higher, completed the program within the last five (5) years, to be exempt from Module 1: Supply Chain Management, Module 2: Procurement and Supply Chain Management, Module 3: Logistics and Transportation, and Module 4: Operations and Process Management in the Supply Chain Management Professional (SCMP) designation program. This accreditation shall be in effect until December 31st, 2021.

Additional information may be found in the Course Offering Information or in Brightspace.

ACADEMIC ACCOMMODATIONS

Learners with a disability (learning, physical, and/or mental health) may qualify for academic and exam accommodations. For more information, or to apply for accommodations, learners should make an appointment with Accessibility Services in the Learner Success Services (LSS) Department. Accessibility Services can also assist learners who may be struggling with learning but do not have a formal diagnosis. To make an appointment visit LSS on the first floor of the south campus or call 403-410-1440. It is the learner's responsibility to contact Accessibility Services and request academic accommodations. For more information, please visit our website at http://www.bowvalleycollege.ca/accessibility.

INSTITUTIONAL POLICIES

Bow Valley College is committed to the highest standards of academic integrity and honesty. Learners are urged to become familiar with and uphold the following policies: Academic Integrity (500-1-7), Learner Code of Conduct, Procedures and Guidelines (500-1-1), Learner Appeals (500-1-12), Attendance (500-1-10), Grading (500-1-6), Academic Continuance and Graduation (500-1-5), and Electronic Communications (300-2-13). Audio or video recording of lectures, labs, seminars, or any other teaching and learning environment by learners is allowed only with consent of the instructor as part of an approved accommodation plan. Recorded material is to be used solely for personal study and is not being used or distributed without prior written consent from the instructor.

Turnitin:

Students may be required to submit their course work to Turnitin, a third-party service provider engaged by BVC. Turnitin identifies plagiarism by checking databases of electronic books and articles, archived webpages, and previously submitted student papers. Students acknowledge that any course work or essays submitted to Turnitin will be included as source documents in the Turnitin.com reference database, where it will be used solely to detect plagiarism. The terms that apply to a student's use of Turnitin are described on Turnitin.com.

Online Exam Proctoring:



Examinations for this course may require proctoring through an online proctoring service. Online proctoring enables online exam taking within a controlled and monitored environment, thereby enhancing academic integrity. Online proctoring may occur through a variety of methods, including but not limited to:

- a. live online proctoring where a remote invigilator authenticates identity and observes completion of an exam using specialized software and recordings;
- b. automated proctoring where the exam session is recorded and AI (artificial intelligence) analyzed;
- c. browser lockdown that limits access to other applications, websites, copying, printing, screen capture and other functions; or
- d. a combination of both live/automated proctoring and browser lockdown.

Course instructors will review recordings, analyses, and data obtained through online proctoring for academic integrity infractions. It is the student's responsibility to meet the technical, software, location, and identity verification requirements necessary to enable online proctoring.

Further details of these policies are available in the Academic Calendar and on the Bow Valley College website, <u>bowvalleycollege.ca</u>.

Learners are encouraged to keep a copy of this course outline for future reference.

Collection of Personal Information:

This course, including your image and voice, may be recorded and made available to you and other students taking the course section. By attending the class(es) online or in person, you consent to the collection of your personal information. If you do not wish to be recorded, please contact your instructor before starting the course/class to discuss alternative arrangements.

You may use the recordings only for educational purposes and you must not copy, share, or use the recordings for any other purpose without the instructor's express permission.

Your personal information is collected in accordance with section 33(c) of the Freedom of Information and Protection of Privacy Act (Alberta) to deliver academic programming, support learner flexibility, promote universal design for learning principles, and for purposes consistent with the course activities and outcomes. If you have any questions about the collection, disclosure, use, or protection of this information, please contact the College's Access and Privacy Officer at <u>foip@bowvalleycollege.ca</u>.