MISSION:
The mission of the Maine Business School is to advance business knowledge, connect with our local and global communities, seek adaptive approaches for business processes, and foster a sense of professionalism, teamwork, and respect for ourselves and our constituents.

COURSE DESCRIPTION:
This course presents the philosophical and technical foundations of business intelligence and analytics (BI&BA). The philosophical principles of business intelligence and analytics are discussed. Important fundamental concepts and tools in business intelligence and analytics are introduced using a structured and integrated approach that moves from initial data collection to final decision outcome assessment. Throughout the course, conditional reasoning and logical thinking in terms of process and systems are emphasized.

COURSE OBJECTIVES:
After completing this course, students are expected to

- develop philosophical and logical thinking and grasp basic data analytical knowledge that are necessary for planning and completing hands-on business analytics projects in support of business decision making
- get prepared for future study of a variety of advanced BI&BA topics in either graduate program or workplace.

Specifically, upon completion of this course, students will

- comprehend enterprise data management infrastructure and system
- build a philosophical foundation of BI&BA
- get familiar with different steps in the BI&BA process
- understand the real nature of Data
- comprehend the concepts of Information and Knowledge and understand their relation and difference in business environment
- grasp basic knowledge of Descriptive Analytics, Predictive Analytics and Prescriptive Analytics
- develop foundational knowledge of Decision Analysis
- respect ethical values and principles governing BI&BA activities

COURSE CONTENT OUTLINE:
Module 1 - A Philosophical Framework
  Systems Paradigm: A New Analytical Perspective
  Data-driven Inductive Reasoning
  Analyticalization of Business/The Business Intelligence and Analytics Life Cycle

Module 2 - Data, Data Collection and Data Management
  Data and Data Collection
  Data Organizing and Wrangling (Pre-processing)
  (This Module prepares you for BUA 681 and 682)
Module 3 - Data Analysis, Information Learning and Knowledge Discovery
  Information vs. Knowledge
  Descriptive Analytics and Data Visualization
  Predictive and Forecasting Analytics
  (This Module prepares you for BUA 683, 684 and 686)

Module 4 - Foundations of Decision Analysis (Prescriptive Analytics)
  Decision Making, Economic Utility, and Decision Optimization
  Ethical Awareness in Data-driven Business Decision Making
  Decision Outcome Assessment
  (This Module prepares you for BUA 685)

Module 5 - Artificial Intelligence in Business
  AI in Action: Natural Language Processing and It's Business Application