

Course Title: **Evidence Based Decision-Making in Applied Human Performance**

Course Code: **ONSPMG901**

Descriptor Start Date: **01/01/2026**

POINTS: **30.00**

LEVEL: **9**

PREREQUISITE/S: **None**

COREQUISITE/S: **None**

RESTRICTION/S:

## LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

**Total learning hours: 300**

## PRESCRIPTOR

This course develops students' capacity to integrate performance technologies, data, and practitioner insight to support timely, evidence-based decisions in applied human performance environments. Emphasising both strategic and real-time decision-making, students will critically engage with tools such as artificial intelligence, predictive modelling, and context-aware systems. Applications span sport, military, emergency response, and expedition environments, with a focus on innovation, contextual intelligence, and culturally responsive, human-centred decision-making.

## LEARNING OUTCOMES

1. Critically evaluate and apply data from diverse sources to enable insightful evidence-based decisions in human performance environments.
2. Use advanced knowledge of artificial intelligence, predictive modelling, and context-aware systems to create culturally responsive, human-centred decisions in real-world environments.
3. Critically reflect on knowledge of data sovereignty with respect to Maori and other Indigenous knowledge cultures.

**Disclaimer: Course descriptors may be amended between teaching periods/semesters**

## CONTENT

1. Foundations of Evidence-Based Decision-Making:
  - a. Strategy vs. execution: when and how decisions matter
  - b. Models of decision-making: bounded rationality, intuition, OODA loop
2. Data Literacy and Technology Awareness:
  - a. Understanding data types and sources in applied settings (wearables, video, etc.)
  - b. Misconceptions about analytics: correlation ? causation, overfitting, ignoring context
  - c. Tool focus: Data dashboards, athlete monitoring platforms, automated reporting systems
3. Visualising and Communicating Data:
  - a. Principles of visual communication: clarity, context, cognition
  - b. From raw to actionable: designing meaningful data stories
  - c. Tools: Tableau, Power BI, R/Shiny dashboards, Excel hacks, custom APIs
4. AI, Machine Learning, and Predictive Modelling:
  - a. What AI can and can't do: automation vs. interpretation
  - b. Introduction to predictive modelling in human performance
  - c. Tools: Python/AutoML, GPT-style interfaces, decision support systems
5. Balancing Analytics with Human Judgement:
  - a. When the numbers lie: knowing when to trust your gut
  - b. Embedding practitioner experience into digital systems
  - c. Bias, error, and ethical issues in data-informed decision-making
6. Culturally Responsive and Context-Aware Decision-Making:
  - a. Interpreting data through Maori and Indigenous frameworks
  - b. Evaluating technologies in diverse environments: cultural, contextual, and relational intelligence
  - c. Frameworks: He Awa Whiria (braided rivers model), Te Whare Tapa Wha

## LEARNING & TEACHING STRATEGIES

Teaching will include online activities and self-directed learning

## ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Data Literacy and Visualisation Task	30.00	1, 2
AI-Aided Decision Strategy Report	40.00	1, 2
Culturally Responsive Data Interpretation Reflection	30.00	1, 3

### Grade Map

#### MAP1

A+ A A- Pass with Distinction  
B+ B B- Pass with Merit  
C+ C C- Pass  
D Fail

**Overall requirement/s to pass the course:**

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## LEARNING RESOURCES

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Will be provided via Canvas.

**For further information, contact:** AUT Online Team

**Principal Programme:** ON1095, Master of Human Performance Leadership

**Related Programme/s:** None

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