



Course Outline (Higher Education)

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|-------------------------|---|
| School: | School of Science, Psychology and Sport |
| Course Title: | DATA ANALYTICS FOR SPORT MANAGEMENT |
| Course ID: | SPMAN3004 |
| Credit Points: | 15.00 |
| Prerequisite(s): | (SPMAN1704) |
| Co-requisite(s): | Nil |
| Exclusion(s): | Nil |
| ASCED: | 080399 |

Description of the Course:

This course introduces students to the application of an analytics framework for sport organisations. The course aims to provide students with knowledge and skill to perform data analysis utilising real-world data to reveal patterns of behaviour and trends to inform decision makers in sport management. The content includes: data analytic frameworks and data mining; the gathering and preparation of data for visual analysis; data visualisation and effective communication of data analytics to key stakeholders. The context of data will focus on sport participation, customer relationship management, sport events, sport facilities and fan engagement.

Grade Scheme: Graded (HD, D, C, P, MF, F, XF)

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks.

Program Level:

| Level of course in Program | AQF Level of Program | | | | | |
|----------------------------|----------------------|---|---|---|---|----|
| | 5 | 6 | 7 | 8 | 9 | 10 |
| Introductory | ■ | ■ | ■ | ■ | ■ | ■ |

| Level of course in Program | AQF Level of Program | | | | | |
|----------------------------|----------------------|---|---|---|---|----|
| | 5 | 6 | 7 | 8 | 9 | 10 |
| Intermediate | ■ | ■ | ■ | ■ | ■ | ■ |
| Advanced | ■ | ■ | ✓ | ■ | ■ | ■ |

Learning Outcomes:

On successful completion of the course the students are expected to be able to:

Knowledge:

- K1.** Identify and describe the utilisation and benefits of data analysis in sport management practice.
- K2.** Describe the data analytics framework and explain the major stages of data analysis.
- K3.** Classify data by type including text, numeric, date/time and geographic data types, including identifying the differences between numerical and categorical, discrete and continuous, and structured and unstructured data.
- K4.** Differentiate methods for capturing data relative to the management and administration of sport organisations and events.
- K5.** Describe and explain privacy, security and ethical considerations when collecting, analysing and presenting data.

Skills:

- S1.** Prepare data for visual analysis by cleaning, validating and formatting data sources.
- S2.** Compile and develop visual analytics and dashboards using business intelligence software.
- S3.** Critically evaluate information using data analytics techniques to inform decision making in developing innovative recommendations, plans and strategies.

Application of knowledge and skills:

- A1.** Compile, clean and organise real-life data in preparation for performing a data analysis.
- A2.** Design and develop a data dashboard to deliver visual analytics to inform trends and strategic decision making.
- A3.** Develop and present an analysis of real-life data for a small to medium size sport organisation providing insights, recommendations and identifying data assumptions and limitations.

Course Content:

The following topics may be covered:

- Data analytics in sport management
- Collecting data for sport management
- Preparing sports data for analysis
- Sports participation analytics
- Analytics for Customer Relationship Management (CRM)
- Event analytics
- Facility analytics
- Engaging with fans
- Effective communication of sports data and analysis

Values:

- V1.** Value the need for, and complexity of, data analytics in sport management practice.
- V2.** Appreciate the importance and benefits of data analytics in providing substantive and useful information to establish trends in sport management.

Graduate Attributes

The Federation University FedUni graduate attributes (GA) are entrenched in the [Higher Education Graduate Attributes Policy](#) (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. **One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program**

| Graduate attribute and descriptor | | Development and acquisition of GAs in the course | |
|-----------------------------------|--|--|-----------------------|
| | | Learning Outcomes (KSA) | Assessment task (AT#) |
| GA 1 Thinkers | Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions. | K2, K3, S3, A3 | AT1, AT3, AT4 |
| GA 2 Innovators | Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change. | N/A | Not applicable |
| GA 3 Citizens | Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately. | K5 | AT4 |
| GA 4 Communicators | Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand. | S2, A3 | AT3, AT4 |
| GA 5 Leaders | Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices. | S3, A3 | AT4 |

Learning Task and Assessment:

| Learning Outcomes Assessed | Learning Tasks | Assessment Type | Weighting |
|----------------------------|---|--|-----------|
| K1, K2, K3, K4, K5 | Multiple choice and short-answer questions to demonstrate continuous understanding of course content. | Online quizzes | 10% - 20% |
| K3, S1, S2, A1 | Compile, clean and organise data to prepare for performing a data analysis | Individual lab file and report | 15% - 30% |
| K3, S2, S3, A2 | Design and develop a data dashboard to present visual analytics and facilitate interpretation of data | Individual lab file and report | 20% - 30% |
| K3, K5, S1, S2, S3, S4, A3 | Develop and present a sport management analysis of a medium size sport organisation, providing insights and recommendations and identifying data assumptions and limitations. | Individual report and video presentation | 30% - 50% |

Adopted Reference Style:

APA

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)