



UNIVERSITY OF CANBERRA

Unit Outline 2015
Faculty of Health

Sport Informatics and Analytics (PG)

9612

This Unit Outline must be read in conjunction with:

- a) *UC Student Guide to Policies*, which sets out University-wide policies and procedures, including information on matters such as plagiarism, grade descriptors, moderation, feedback and deferred exams, and is available at (*scroll to bottom of page*)
<http://www.canberra.edu.au/student-services>
- b) *UC Guide to Student Services*, and is available at (*scroll to bottom of page*)
<http://www.canberra.edu.au/student-services>
- c) Any additional information specified in section 6h.

1: General Information

1a Unit title: Sport Informatics and Analytics

1b Unit number: 9612

1c Teaching Period and year offered: Commencing Semester 1, 2015

1d Credit point value: 3

1e Unit level: PG

1f Name of Unit Convener and contact details (including telephone and email)

Dr Naroa Etxebarria
Bldg, Floor & Room: 12, C22
Telephone: (02) 6201 2613
Facsimile: (02) 6201 5615
Naroa.Etxebarria@canberra.edu.au

1g Administrative contact details (including name, location, telephone and email)

Marial Kot
Faculty Office Health
Faculty of Health
Marial.Kot@canberra.edu.au
Bldg, Floor & Room: 12, D34 - Map
Primary Telephone: (02) 6201 2796

2: Academic Content

2a Unit description and learning outcomes

This unit develops students' observation, recording and analysis of performance in sport. It presents an interdisciplinary approach to sport informatics and analytics. It builds upon students' experience of sport performance and aims to provide opportunities for work integrated learning.

At the completion of this unit, students will be able to:

1. Demonstrate disciplined and critical insights into the observation, recording and analysis of performance in sport training and competition environments.
2. Apply knowledge of better practice in sport informatics and analytics to their own sport contexts.
3. Reflect critically on the use of sport informatics and analytics to anticipate and develop opportunities to transform their own and athletes' performance.

2b Attributes of UC Graduates

The University recognises that individuals entering its programs bring with them a diversity of personal and professional attributes that should be further developed by their experience as students and graduates of the University.

The University of Canberra's Generic Skills and Attributes document is available through the policy database at: <http://www.canberra.edu.au/learning-teaching/uc-graduate-attributes>.

By the end of their Masters course, graduates will have developed skills in:

1. *Communication*: present knowledge, ideas and opinions effectively and communicate within and across professional and cultural boundaries.
2. *Analysis and inquiry*: gather information, and analyse and evaluate information and situations in a systematic, creative and insightful ways.
3. *Problem solving*: apply problem-solving processes in novel situations; identify and analyse problems then formulate and implement solutions.
4. *Working independently and with others*: plan their own work, be self-directed, and use interpersonal skills and attitudes to work collaboratively.
5. *Professionalism and social responsibility*: the capacity and intention to use professional knowledge and skills ethically and responsibly, for the benefit of others and the environment.

Students on the Masters course and in this unit of study will develop the qualities of critical thinking, curiosity and reflective practice. They will use foresight, initiative and leadership, and be open to alternative perspectives. As graduates, they will continue to learn and thrive in environments of complexity, ambiguity and change.

Unit Learning Outcomes	University of Canberra Graduate Skills and Attributes
1. Demonstrate disciplined and critical insights into the observation, recording and analysis of performance in sport training and competition environments.	Skills: Communication; Analysis and inquiry; Problem solving; Working independently and with others; Professionalism and social responsibility. Attributes: critical thinking; curiosity; and reflective practice.
2. Apply knowledge of better practice in sport informatics and analytics to their own sport contexts.	Skills: Analysis and inquiry; Problem solving; Working independently and with others; Professionalism and social responsibility. Attributes: critical thinking; curiosity; reflective practice; initiative; and leadership and lifelong learning.
3. Reflect critically on the use of sport informatics and analytics to anticipate and develop opportunities to transform their own and athletes' performance.	Skills: Communication; Analysis and inquiry; Problem solving; Working independently and with others; Professionalism and social responsibility. Attributes: critical thinking; curiosity; reflective practice; initiative; leadership; open to alternative perspectives, professionalism, self-awareness and lifelong learning.

2c Prerequisites and/or co-requisites

Participants in this unit are encouraged to draw upon their own sport experience and their involvement in the observation, recording and analysis of sport performance. It is recommended that participants be engaged in or have had recent, relevant experience in some sport contexts either as a coach, support staff or administrator.

3: Delivery of Unit and Timetable

3a Delivery mode

This is an online course commencing Semester 1, 2015. The time required to cover the unit content will vary from individual to individual. This is a self-paced unit. Some of the learning activities require collaboration and co-operation with other students.

3b Timetable of activities, such as lectures/ tutorials/ practicals/ field classes, showing key dates and topics

The content of the unit has been designed to support self-directed, flexible learning opportunities in the context of structured exposure to ideas and practices. Our aim is to blend your learning experiences in this unit through a variety of synchronous and asynchronous activities.

There will be an orientation activity at the start of the unit and this will take place over two weeks (starting week beginning 9 February 2015 for full-time students). This activity requires you to write (or talk) about yourself as a learner and to outline any experience you have had with sport informatics and analytics. This activity will make a significant contribution to the unit's discussion of your personal learning environment.

In Semester 1 2015, students in this unit will participate in a four-week open online course in Sport Informatics and Analytics. The course will provide an opportunity for students to meet a diverse community of scholars and practitioners.

4: Unit Resources

4a Lists of required texts/readings

There are no required texts or readings for this unit. A list of recommended readings can be found at <https://sites.google.com/site/ucsportinformaticsandanalytics/home> and will be available also on the unit's Moodle site.

4b Materials and equipment

It is anticipated that students will have access to the Internet and will connect to the Internet with whatever device (or devices) best suits their needs and location.

4c Unit website

To find your unit site online, login to [LearnOnline\(Moodle\)](#) using your student ID. Note that your unit site has a profiles page that displays your name and email address for the benefit of other students. If you prefer to hide your email address, [click here for instructions](#).

Extensive use will be made of cloud based resources in this unit. There is a fundamental commitment made to use and create open educational resources.

5: Assessment

5a Assessment overview

This unit is assessed through the submission of an e-portfolio (see 5c below for details about the formative and summative features of this assessment approach).

Task	Weighting (%)	Learning outcomes assessed
<i>E-Portfolio</i>	A total of 100% comprised of three assessment points	1, 2, 3

5b Attributes of UC Graduates

The University of Canberra provides a high-quality, innovative educational experience. Our courses are designed to equip our graduates to be leaders of their profession, to be outward-looking global citizens and to value lifelong learning.

- 1. UC graduates are professional.** Because we collaborate closely with industry and other stakeholders, our graduates have the knowledge, skills and attitudes to succeed in their profession and become leaders in their field.

UC graduates can:

- employ up-to-date and relevant knowledge and skills;
- communicate effectively;
- use creativity, critical thinking, analysis and research skills to solve theoretical and real-world problems;
- work collaboratively as part of a team, negotiate, and resolve conflict;
- display initiative and drive, and use their organisation skills to plan and manage their workload;
- take pride in their professional and personal integrity.

- 2. UC graduates are global citizens.** We support students to gain the knowledge and confidence to be global citizens.

UC graduates can:

- think globally about issues in their profession;
- adopt an informed and balanced approach across professional and international boundaries;
- understand issues in their profession from the perspective of other cultures;
- communicate effectively in diverse cultural and social settings;
- make creative use of technology in their learning and professional lives;
- behave ethically and sustainably in their professional and personal lives.

- 3. UC graduates are lifelong learners.** Our graduates are passionate about being at the forefront of their profession, staying in touch with the latest research, news and technology.

UC graduates can:

- reflect on their own practice, updating and adapting their knowledge and skills for continual professional and academic development;
- be self-aware;
- adapt to complexity, ambiguity and change by being flexible and keen to engage with new ideas;
- evaluate and adopt new technology.

5c Details of each assessment item

The unit is assessed by the compilation of an electronic portfolio (e-portfolio). This assignment item requires that you document your activities online throughout the unit and present them as an e-portfolio. The aim of this assessment item is to share a record of your learning journey through the unit. The style and format are open to you but must reflect your participation and engagement in the unit's learning activities. The e-portfolio should demonstrate evidence of regular and continuous reporting of and reflection on your involvement in the unit. It should contain an example of your use of supervised (machine) learning with sport data.

There are three assessment points for the e-portfolio:

1. 20 March 2015: Stage 1 Introduction (20% of the total marks for the unit)
2. 24 April 2015: Stage 2 Development (30% of the total marks for the unit)
3. 8 May 2015: Stage 3 Refinement (50% of the total marks for the unit)

For each stage of the assessment, 40% of the marks available in this assessment item will be allocated to evidence of continuous engagement in learning activities throughout the stage of the unit. 60% of the marks available in this assessment item will be allocated to evidence of in depth, thoughtful, questioning, insightful reflection on the unit's learning activities and the completion of a supervised (machine) learning task.

Evidence of continuous engagement is defined as:

- Participation in, and reflecting on, the unit's learning activities.
- Exploration that extends your critical engagement with the unit's content.
- Responsiveness to the work of other unit participants.

Evidence of depth and insightfulness is defined as:

- Demonstrates ability to think, question, read, research, and investigate within the unit's learning activities.
- The quality of writing, use of citations, hyperlinks, clarity of expression and explanation, voicing of opinions, discussion of ideas with others, use of relevant images, and use of examples.
- The inclusion of additional contributions to your e-portfolio through other sharing opportunities (presentations, wikis videos, blog posts).

The total mark for this assessment item will represent 100% of your final grade.

5d Submission of assessment items

A number of submission opportunities are available in this unit. It is recommended that students use Mahara as their e-portfolio platform. This will make formal submission through Moodle possible. However, students will be encouraged to explore e-portfolio platforms that suit their particular needs and these will be discussed at the outset of the course.

Late submission penalty policy for the Faculty of Health

All assessments should be submitted by the specified due *date* and *time* in the Unit Outline. Any submissions received after the due date and time without an approved formal extension will undergo a mark adjustment.

In extenuating circumstances, a late submission may be considered without a mark adjustment on production of supporting documentation and at the discretion of the Unit Convenor (i.e. the Unit Convenor agrees to an extension to the deadline for submission).

The following conditions will apply to late submissions without an approved extension:

- Mark adjustment: 10% of the maximum mark available for the assessment task will be deducted for each day late up until five days late. For example an essay awarded 60% (60/100) submitted 2 days late will receive a mark adjustment of 10% per day, therefore, the adjusted maximum mark for that item will be 40% (40/100).
- Similarly, if the weighting is used then a piece of work worth 50% of the unit which received 30/50 would be reduced by 5 marks per day (i.e. 10% of 50) and would therefore receive a maximum adjusted mark of 20/50 if late by two days.
- Submissions received more than 5 days after the prescribed date and time will not be accepted for marking, a mark of zero (0) will be awarded for the item.
- For the purposes of these penalties, all days of the week count, including weekends and public holidays, even when the University may be closed.
- The minimum possible mark for late submission is zero.
- For clarification, one (1) minute past the specified due date and time is considered a late submission.

It is students' responsibility to be familiar with the electronic submission process (e.g., the use of MOODLE and URKUND). Students are reminded to ensure they plan well enabling adequate time to submit assessments prior to the deadline, in order to avoid a mark adjustment.

5e Special assessment requirements

It is recognised that students may follow this unit in a variety of modes. The course convenor will work with students to ensure that any special assessment requirements are addressed.

5f Supplementary assessment

Refer to the UC [Supplementary Assessment Policy](#)

5g Academic Integrity

Students have a responsibility to uphold University standards on ethical scholarship. Good scholarship involves building on the work of others and use of others' work must be acknowledged with proper attribution made. Cheating, plagiarism, and falsification of data are dishonest practices that contravene academic values. Please see [UC's Academic Integrity Policy](#).

To enhance understanding of academic integrity, it is expected that all students will complete the LearnOnline Academic Integrity Module (AIM) at least once during their course of study. The module is automatically available as a listed site when students log into LearnOnline.

5h Use of text-matching software

The University of Canberra has available, through LearnOnline (Moodle), text-matching software that helps students and staff reduce plagiarism and improve understandings of

academic integrity. Known as URKUND, the software matches submitted text in student assignments against material from various sources: the internet, published books and journals, and previously submitted student texts. [Click here for further information on the URKUND text-matching software.](#)

6: Student Responsibility

6a Workload

The amount of time you will need to spend on study in this unit will depend on a number of factors including your prior knowledge, learning skill level and learning style. Nevertheless, in planning your time commitments you should note that for a 3cp unit the total notional workload over the semester or term is assumed to be 150 hours. These hours include time spent in classes. The total workload for units of different credit point value should vary proportionally. For example, for a 6cp unit the total notional workload over a semester or term is assumed to be 300 hours.

6b Inclusion and Welfare

Students who need assistance in undertaking the unit because of disability or other circumstances should inform their Unit Convener or [Inclusion and Welfare](#) as soon as possible so the necessary arrangements can be made.

6c Participation requirements

This is an online course commencing Semester 1, 2015. The time required to cover the unit content will vary from individual to individual. This is a self-paced unit. Some of the learning activities require collaboration and co-operation with other students.

6d Withdrawal

If you are planning to withdraw please discuss with your unit convener. Please see [Withdrawal of Units](#) for further information on deadlines.

6e Required ICT skills

This is an online unit. Every attempt will be made to ensure that students are supported in their access to the unit. Particular emphasis is placed upon self-paced learning and the compilation of an e-portfolio. There will be an emphasis on ICT skills at the start of the unit and throughout the unit.

6f In-Unit Costs

(Note: To calculate your unit fees see: [How do I calculate my fees?](#)
The online [UC Co-op Textbook Search](#) is available for purchasing text books.)

6g Work placements, internships or practicums

None.

6h Additional information

This unit offers an opportunity to engage in an area of growing importance in sport. Students are encouraged to embrace the opportunities digital technologies afford in this area. It will be an adventure in new practices and experiences characterised by high support, high demand.

7: Student Feedback

All students enrolled in this unit will have an opportunity to provide anonymous feedback on the unit at the end of the Semester via the Unit Satisfaction Survey (USS) which you can access by logging into MyUC via the UC homepage: <http://www.canberra.edu.au/home/>. Your lecturer or tutor may also invite you to provide more detailed feedback on their teaching through an anonymous questionnaire.

8: Authority of this Unit Outline

Any change to the information contained in Section 2 (Academic content), and Section 5 (Assessment) of this document, will only be made by the Unit Convener if the written agreement of Head of Discipline and a majority of students has been obtained; and if written advice of the change is then provided on the unit site in the learning management system. If this is not possible, written advice of the change must be then forwarded to each student enrolled in the unit at their registered term address. Any individual student who believes him/herself to be disadvantaged by a change is encouraged to discuss the matter with the Unit Convener.