International Summer School

3rd to 7th June 2024
Faculty of Sport Sciences (STAPS)
University of Rouen Normandy, France
hosted by Rouen Normandie Rugby

The University of Rouen Normandy and our campuses

The University of Rouen Normandy (URN) is a comprehensive university offering an innovative educational programme of over 300 undergraduate, graduate and PhD programmes to its 34,000 students, which is overseen by the three academic divisions: i) Materials, Energy, Digital Science and Environment, ii) Chemistry, Biology and Health; iii) Humanities, Culture and Social sciences. Research is conducted within its 40 certified research units, 13 of which are associated with national research organisations.

With 230 institutional partners in Europe and partnerships in over 50 countries in the world, the URN hosts more than 3,000 foreign students and 200 exchange students.

Third faculty of sport sciences in France, the Faculty of Sport Sciences of the University of Rouen Normandy is Ranked 146 (Shanghai Ranking). The faculty has been chosen as a training location for gymnastics during the Olympic Games 2024 (Paris).

Located at 1:30 from Paris by train and 1:45 by car as well as just 40 minutes from the seaside, the city of Rouen enjoys a beneficial geographic location.

This course aims to provide students with a comprehensive understanding of performance analysis and collective behaviors in team sports, particularly focusing on rugby. It emphasizes how performance analysis can inform game strategies and subsequently influence training methodologies.

Primarily, the course delves into defining key performance indicators and collective behaviors, as well as identifying the necessary data collection methods on the field to measure and process these indicators effectively.

Additionally, it explores designing interventions aimed at enhancing performance and organizing collective behaviors. It highlights the role of performance analysis in evaluating the effectiveness of these interventions, following the constraint-led approach and ecological dynamics framework as outlined by Button et al. (2020).

The course covers a range of topics including performance analysis, data analytics, video analysis, positional data analysis, social network analysis, representative learning design, constraint-led approach, and practical strategies for skill acquisition.
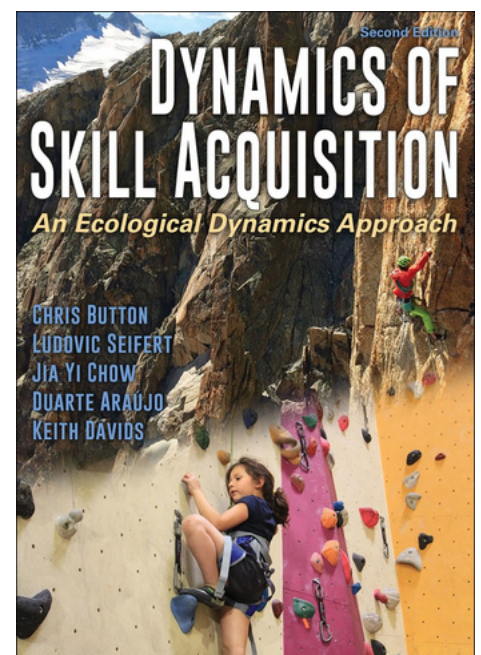
Intended Learning Outcomes

By the end of the course, students should be able to:

1. Define indicators of performance in **rugby** and create analysis dashboard to quantify those indicators.
2. Collect multi-source data using indoor Global Positional System, video coding and sequencing (Dartfish or SportCode software) and social network analysis (based on passes network).
3. Intertwine data or various nature (e.g. video, passes, events, tracking data) to provide a relevant analysis of the teams performance, individual and collective behaviours.
4. Identify key features of intervention design, analyse and apply relevant modifications to enhance skill acquisition, objectively assess the effectiveness of their intervention in **rugby**.

Assessment: Group of 4-5 students, 10 minutes of PowerPoint oral presentation (Appendix)
English level: B2
Level: Master
Number of hours: 30
Number of ECTS Credits: 4 (a certificate will be provided to all attendees)

	Monday 3	Tuesday 4	Wednesday 5	Thursday 6	Friday 7
Morning session	9:00 to 10:00 Introduction & Ecological Dynamics framework to performance (**Ludovic Seifert**, University of Rouen) 10:00 to 11:00 Performance Analysis in rugby (**Vincent Krischer**, French Federation of Rugby) 11:15 to 12:15 Collective Behaviour Analysis in Rugby (**Sylvain Bouthier**, French Federation of Rugby & Racing 92)	9:00 to 12:00 Data Collection in Rugby (made by the students at Rouen Normandie Rugby, and assisted by **Nicolas Morazin**, Rouen Normandie Rugby)	9:00 to 10:00 Collective behaviour analysis from positional data (**Pierre Vauclin**, University of Rouen) 10:15 to 12h Group Work	9:00 to 10:00 Performance and Skill Acquisition (**Edward Coughlan**, MTU, Cork, Ireland) 10:15 to 12h Group Work	9:00 to 12:00 Intervention in Rugby (made by the students at Rouen Normandie Rugby, and assisted by **Nicolas Morazin**, Rouen Normandie Rugby)
Lunch (12 to 13:30)	Lunch & Group Work	Lunch & Group Work	Lunch & Group Work	Lunch & Group Work	Lunch & Group Work
Afternoon Session	13:45 to 14:45 Performance Analysis in rugby (**Nicolas Morazin**, Rouen Normandie rugby) 15:00 to 16:00 Coaching at the Edge of Creativity: Metastability & Rugby (**Alan Dunton & Sam Jermyn**, MTU, Cork, Ireland) 16:00 to 17:15 Group work	14:00 to 14:45 Passes Network analysis (**Quentin Bourgeais**, University of Rouen) 15:00 to 17:00 Group Work	13:30 to 17:00 Group work	13:30 to 17:00 Group work	13:30 to 15:30 Group Work 15:30 to 16:30 **Student Presentations + Reflections on the Summer School**

CAMPUS DE MONT-SAINT-AIGNAN
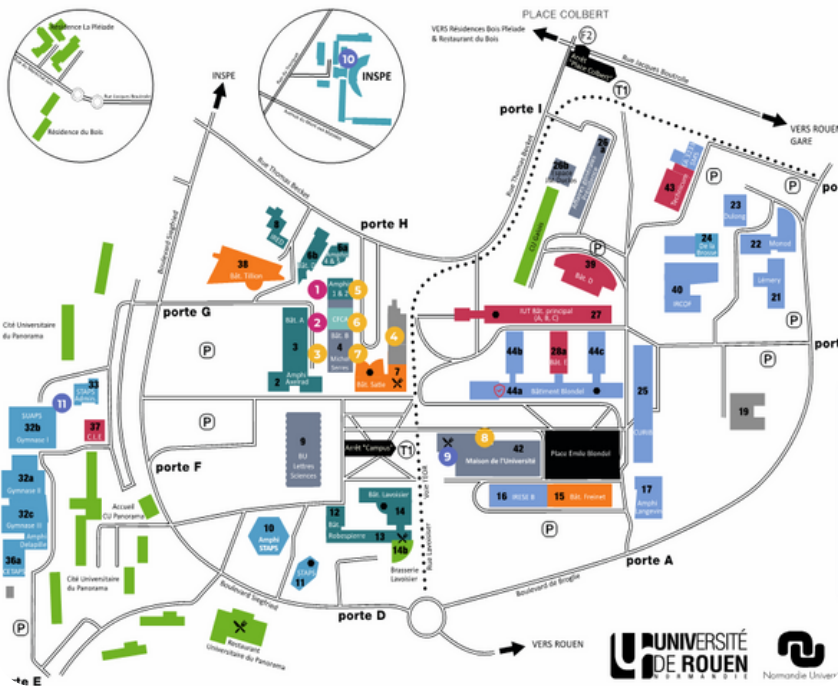
Contact and Information

Pedagogical fees and accomodation funded by the University of Rouen Normandy

Registration : ludovic.seifert@univ-rouen.fr

Adress : University of Rouen Normandy, Rue Thomas Becket, 76821 Mont Saint Aignan Cedex, France

	A+, A, A-	B+, B	B-, C+, C	D+, D	E
Quality of presentation	Information provided clearly answers the question set out. Presentation is clear and the flow is coherent and logical. Pace is appropriate.	Information mostly answers the question set. Presentation is mostly clear and the flow generally coherent and logical.	There are weaknesses or absences in the information provided and the flow of presentation is unclear at times.	Much of the information provided does not answer the question and the flow is difficult to understand.	Little relevant information and unclear flow.
Familiarity with material	Demonstrates a very good understanding of the material. Able to answer questions in a poised and articulate manner with a high level of confidence.	Demonstrates a good understanding of the material. Able to answer most of the questions clearly and with confidence.	Demonstrates a basic understanding of the material. Able to answer some of the questions clearly but lacks confidence at times.	Demonstrates a weak understanding of the material. Has difficulty in answering questions and lacks confidence.	Does not demonstrates any understanding of the material. Unable to answer questions.
Use of technology	Uses relevant technology very well to supplement and enhance the quality of presentation.	Good use of technology to improve the presentation.	Some use of technology to help improve the presentation.	Little use of relevant technology in the presentation.	No clear use of technology in the presentation.
Communication and teamwork	Communication is very clear and easy to understand. All members of the team make strong, worthwhile contributions.	Communication is clear and easy to understand most of the time. Most members of the team make good contributions.	Communication is unclear at times. Varied contributions of different team members.	Communication is unclear and there and difficult to understand. Most contribution provided by a single team member.	Communication is unclear and not possible to understand. No team member makes worthwhile contribution.