

THEME 04: Visioning Engagement with RVCA

IDES4310B - 2025-26
Instructor: Rob Watters

Our partner, the [Rideau Valley Conservation Authority](#) (RVCA), is a multi-mission organization with deep knowledge and care for diverse ecosystems. Their work focuses on conserving and rehabilitating land while making nature accessible to all.

The RVCA stewards over 60 parcels of land within the Rideau River watershed, including six developed visitor sites offering hiking, education, beaches, play, events, and more. These are places to learn, enjoy, re-energize, and connect with the natural world. Beyond public experiences, RVCA engages in meaningful work in land restoration and ecological preservation. For conservation groups to thrive, they need public support, funding, and a strong emotional connection with users. We will use design to realize these goals.

The theme group will identify meaningful opportunities including — services, educational tools, products, built structures, experiences, new business models and more —to support community and nature. **You will work directly with RVCA to uncover and develop your unique design solution!**

More about this theme:

Learn about the wide range of RVCA's responsibilities and programming—protecting the watershed and making nature accessible	Address the needs of visitors of all ages and accessibility levels	They collect valuable local environment data —how might it be used in design?	Consider new experiences that are fun, safe, and accessible
Water access and sport —what are the opportunities?	Beach areas with play zones for families	Explore revenue-generating opportunities —what makes sense within their mission?	This group knows their business - our theme group will help them consider a designed future!!
Hiking, boardwalks, rest areas - immerse	240,000 trees grown and planted each year!	They are naturalists and builders —so what comes next?	
Programming to draw in local and urban students into natural spaces	A year-round forest school and education center connects students with nature	Enhance accessibility and cultural sensitivity across facilities	NEXT: Over the summer, observe all aspects of public spaces—the people, the flow, the experience, and revenue generation. What creates bottlenecks or user frustration? What behaviours degrade the space? Engage with activity areas and take notes!
	There is currently a simple gathering space for events—what more could it become?		

Note:

IDES4310 Capstone will be coordinated by Stephen Field and Rob Watters—your mentors, guides, and let's say, your CEOs. Our role is to help direct and focus your group's efforts to successfully complete your project. When you present your statement of interest, feel free to share any early ideas or directions you're considering. If nothing stands out yet, no problem—we'll work together to brainstorm, clarify your interests, and explore the business potential of your project.

THEME 05: Design for Sustainable Practices

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Environmental sustainability is a global as well as local issue. There is growing momentum across industries and social sectors to drive meaningful change. This can result in solutions across the spectrum - product, service, or system.

Design opportunities can be explored through several lenses: a) Mitigating climate change (e.g., reducing energy use), b) Preventing further degradation of nature (e.g., preserving resources), c) Adapting to climate-related impacts (e.g., resilience and adjustment).

Design has a vital role to play in making real progress on all these fronts. This theme won't have a single project partner due to the breadth of the topic, but will draw on the knowledge and insights of multiple sustainability experts. You'll also uncover unique advisors through your own research as you and your team shape your individual project focus.

What sustainability issue concerns you most and deserves your pragmatic and creative focus?

Consider breadth of theme options:

Collaborate with your group to explore diverse environmental challenges and opportunities

Climate change impacts: how can design help people adapt and perform?

Pollution and waste: minimize, redirect, reduce, improve efficiency

Food systems, habitats, transport, water resources—where can design intervene?

Energy: usage, reduction, harvesting, storage

Class materials and guidance will support your research toward a focused project

Explore new tech materials, bio-based options, and circular design processes

We need both: better solutions for existing problems or a focus on new opportunities.

Consider the many dimensions to environmental sustainability through design - then get specific

Consider micro-sensors: for monitoring, data collection, tracking, timing for actionable insight into climate change

Consider simplification and modularity in systems, products, and packaging

Systems and products that promote behavior change

NEXT: Over the summer, explore sustainability in action—user behaviour, material flows, lived experiences, and media narratives. What's working? Where are the bottlenecks? What system tweaks, products, services, or behaviours could address the issues? Take notes!

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THEME 06: Human Performance + Protection

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Instructor: Rob Watters

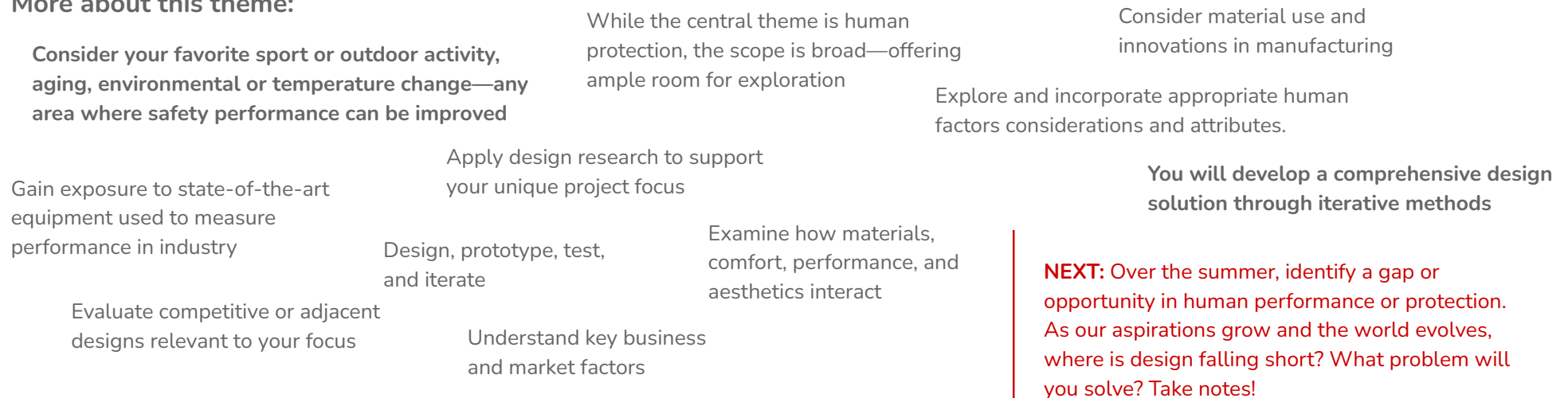
Protecting humans from physical forces and injury has been a continuous effort throughout history, helping us overcome challenges across environments, sports, and professions. Our industry advisor, [Biokinetics](#), based in Ottawa, brings over 45 years of experience in human protection and performance.

The convergence of science, technology, human physiology, usability, and design plays a vital role in driving meaningful and measurable performance innovation. By tackling real problems and engaging in prototyping and testing, we can address critical safety challenges and advance human performance.

Importantly, this isn't limited to direct impacts on the body. Projects can explore broader, emerging challenges affecting people and their ability to perform.

What area of focus can you identify for improvement and innovation with human performance?

More about this theme:



NEXT: Over the summer, identify a gap or opportunity in human performance or protection. As our aspirations grow and the world evolves, where is design falling short? What problem will you solve? Take notes!

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