

# Trent Enrichment Program Course Guide



Session 1 – April 27, 2026

Session 2 – April 28, 2026

Trent University  
Peterborough, Symons Campus

Trent University is pleased to extend to you the opportunity to participate in our 32<sup>nd</sup> annual Enrichment Course Program for elementary school students in grades 7 and 8. The program consists of a wide offering of courses designed to promote study at the post-secondary level and to provide an opportunity for students to experience a university setting.

**Session #1** – April 27, 2026 - PVNCCDSB

**Session #2** – April 28, 2026 - KPRDSB and specific private schools

**\*\* Please contact 705-748-1011 ext. 7757 or ext. 1260 if you have any questions about which session your school has been assigned to\*\***

### ***IMPORTANT Dates & Reminders:***

Student registration & course selection will open:

**Session #1** – February 2, 2026 at 8:00am – PVNCCDSB

**Session #2** – February 3, 2026 at 8:00am – KPRDSB and selected private schools

Parents and educators will need to use the internet to access the registration program via <https://trentenrichmentprogram.ca> website.

- Please do not Google this website or use any other search engine; it is not searchable and may take you to incorrect pages.*
- FULL INSTRUCTIONS were included in the Student Invitation Letter.
- The student's name, school, contact information and other personal data will be entered. Courses will also be requested during this process.
- Our online registration system awards seats based on a First Come/First Serve basis dependent on the date and time stamp your course selections are submitted.
- It will attempt to place a student in each of their top 2 choices before looking to 6 alternative choices. On this premise, we cannot guarantee which order that a student will receive their courses.

Student registration & course selection will close on February 23, 2026 at 5pm for all schools.

The School must receive full payment by March 3, 2026 in order for Teachers to approve your student for the Course Allocation process.

Beginning March 23, 2026 at 10am students will be able to log in to their account and review their Course Schedule.

### **Program Information**

**Note: Students should bring their own pencils, pens and note paper.**

**Location:**

Trent University, Symons Campus, Peterborough

**Daily Arrival:**

Registration will take place in the lobby of the Wenjack Theatre at Otonabee College. Registration will begin at 8:00am and conclude at 8:30am. If bussing is not provided by the school, students can be dropped off each day at the Wenjack Theatre at Otonabee College. Students must be picked up from the same location each day by 3:30pm. (Follow signage). All students must sign-in and sign-out with their school chaperones at the start and end of day.

Chaperones who are not bussed will be provided with a Parking Code once they have signed in.

**Welcome & Orientation:**

Takes place at 8:30am in the Wenjack Theatre. During orientation, students will meet and sit with other students in their AM course. At the conclusion of the orientation session, all students and chaperones will be escorted to their appropriate classrooms by conference staff.

**Day Schedule:**

Daily Registration Opens	8:00am
Welcome at Wenjack	8:30am to 8:45am
Travel to Classroom	8:45am to 9:00am
AM Course (2.5 hours)	9:00am to 11:30am
Lunch meet with School Chaperone	11:30am to 12:15pm
Wenjack: into new course groups	12:15pm to 12:30pm
Travel to Classroom	12:30pm 12:45pm
PM course (2.5 hours)	12:45pm to 3:15pm
Sign-out with School Chaperone	3:30pm

**Lunch Facilities:**

Lunch is not provided. Students are encouraged to bring a litter-less lunch from home, although the cafeteria will be open for those who choose to purchase their lunch. **Trent University is a cashless campus, credit/debit cards will be needed to purchase your lunches. Cash will not be accepted.** All students must check-in with their school chaperone in their designated area and are not permitted to leave campus. Chaperones from each respective school will be in attendance at this time to ensure appropriate conduct from students. Attendance will be taken following the lunch period in each course.

**Support Staff:**

Conference Staff will be available throughout the program to assist with any problems/concerns that you might have. Please feel free to call upon the staff should the need arise. Each **School Board is to provide chaperone(s)** for supervision of the students **at a ratio of 1:12 for each entire day of the program.**

**For urgent matters during the Program please contact the  
Trent University Conference & Hospitality Administrative Office at (705) 748-1260**

# TRENT ENRICHMENT PROGRAM 2026 - COURSE TABLE OF CONTENTS

## Arts (Visual, Performing & Applied) & Wellness

- 11 Inner Strength: Yoga for Mental Clarity
- 12 Playing with Shakespeare
- 13 Journalism 101 Meets Improv
- 14 Reading and Making Comics

## Business & Marketing

- 21 Building your Million Dollar Business
- 22 Finding my Purpose to Lead with Passion
- 23 The Launch Lab: From Brainstorm to Business Mogul

## Humanities & Social Science

- 31 Philosophy in the News
- 32 Game Theory: Outsmart, Outplay, Outthink
- 33 Mind Activities for Growth: Enhance Brain Development with Chinese Strategic Games
- 34 Kickoff! Exploring Sports and the World They Shape
- 35 Do It for the Plot
- 36 What is Science?

## STEM Programs (Science, Technology, Engineering, Mathematics)

- 41 CSI Trent: What You Don't See on T.V.
- 42 Exploring the Magic of Chemistry
- 43 Introduction to the Art and Science of Nursing
- 44 The Physics of Superheroes
- 45 There is No "Normal": Introduction to Abnormal Psychology

**Note: The University reserves the right to cancel a course where enrollment is less than 10 students.**

## **Arts (Visual, Performing & Applied) & Wellness**

### **11 Inner Strength: Yoga for Mental Clarity**

Participants will learn the different aspects of yoga and qi-yoga to help manage stress and improve concentration. We will learn specific breathing techniques, yoga poses, qi-yoga movements, mantras (phrases), mudras (hand gestures), and meditation techniques to help participants relieve stress and improve mental clarity. Participants should wear cool, comfortable clothing that they can move around in (e.g. yoga pants & t-shirts). Yoga mats will be supplied by the instructor.

Instructor: *Lisa Kavanagh*

*Lisa has been teaching yoga for the last 14 years with a 500-hour Yoga Instructor/Yoga Therapist certification, as well as a Qi-Yoga certification. She offers classes for kids, teens, adults, and seniors, and has been teaching in the Enrichment program since 2019.*

### **12 Playing With Shakespeare**

When asked what books they found hardest to read in school, students often point to the works of William Shakespeare. All that iambic pentameter, all those weird old words that nobody uses anymore, all those characters from history and mythology that you need dozens of footnotes to understand - who wouldn't be a little lost? But here's the thing: Shakespeare didn't write books; he wrote plays. So, are we getting it all wrong when we sit down to read those plays like books? How is a play different from a book? What can a play offer an audience that a book cannot offer a reader? How can action, voice, space, and time help bring the words we see on the page to life? Students in this enrichment course will get a brief introduction to the study of Shakespeare and, way more importantly, a chance to *play* with his plays. Over the course of the day, we will learn how late-16th and early-17th century actors worked to bring Shakespeare's language to life, we will imagine possibilities for staging, we will perform short scenes, and we will discuss how these 400+ year-old plays might still have interesting things to say to us in 2025. No acting or theatre experience necessary, just a willingness to have some fun.

Instructor: *Andrew Loeb*

*Andrew Loeb has been a member of the Trent English Department since 2017. His teaching focus is on the literature of the early modern period in England (1500-1700), especially the dramatic works of Shakespeare and his contemporaries. His research interests include musical theories and practices in this period, representations of witches and other supernatural figures on the stage, and early modern conceptions of gender, sexuality, class, race, and other categories of identity. He is also the co-founder of The Electric City Players, a local community theatre arts collective that stages productions of Shakespeare plays and other classical theatre. He has co-directed, alongside Jacqueline Barrow at Fleming College, productions of Macbeth (2024) and Twelfth Night (2025).*

### **13 Journalism 101 Meets Improv**

In this class, we take journalism off the page and onto the stage, applying the essential skills needed for both improvising and journalism: keen listening and communicating the essential facts to their audiences with absolute brevity. Class time is split between discussion sessions around the 5 Ws of reporting and on-your-feet improv games based on the well-known principle of "Yes, And". Learning to evaluate journalism and media through the safe and supportive foundations of improvising is a fun way to foster social skills, creativity and critical thinking. Developed in response to a November 2025 survey that showed a large percentage of teenagers hold negative views about the media, this class teaches how to identify and differentiate trustworthy journalism from "fake news".

Instructor: *Patricia Maitland*

*Patricia is a journalist and improviser, having spent over 20 years writing for national Canadian magazines and producing television for national and international broadcasters. She studied improv at the Second City Conservatory in Toronto and co-founded klusterfork entertainment (2019-2025), a Peterborough-based production company that performed comedy shows at Market Hall Performing Arts Centre and ran classes teaching improv skills to adults.*

## 14 Reading and Making Comics

In this course, we will learn how comics have been a part of human history from cave paintings to the graphic novel, and how Comics Studies scholars have come to critically examine this multimodal literary art form. By reading and analyzing classic comic strips, we will come to understand attributes of the comic strip and how text and illustration work together to create a humorous narrative. We will practice captioning and/or illustrating one-, two-, and three-panel comics to learn the mechanics of the art form. Then, in the final portion of the course, students will apply what they have learned about story, space, time, action, balloons, captions, emanata, layouts, panels, gutters, lettering, and illustration in a creative, hands-on way: they will create their own comic strips!

Instructor: *Molly McKibbin*

*Dr. Molly McKibbin has a doctorate in English and teaches the Graphic Fiction course in the English Department.*

## **Business & Marketing**

### 21 Building Your Million Dollar Business

This course will explore the key steps in launching a business, guiding students through interactive activities that build teamwork, creativity, and practical decision-making skills. Working in groups, students will collaborate on business ideas, practice problem-solving, and experience the process of turning concepts into actionable plans.

Instructor: *David Blakely*

*David is a graduate of Peterborough Collegiate and McMaster University, and a former Fortune 500 CEO (NYSE: EFX and AIZ). After his corporate leadership roles, he raised venture capital and launched an I.T. business that grew to become Canada's Fastest Growing Company (PROFIT Magazine), employing over 100 people locally before its sale. For the past five years, David has been a Sessional Instructor in the School of Business, teaching courses in Entrepreneurship, Selling, New Venture Planning, and Retail Marketing at both the Peterborough and Durham campuses. A native of Peterborough, he now lives in Cobourg with his wife, and together they are the proud parents of five children, four university graduates and one currently in second year. David participated in his first Enrichment Program in April 2025, which he describes as the best two-day teaching experience he has ever had, with highly motivated and energetic students. With his background as both a corporate leader and entrepreneur, and his experience teaching hundreds of students, David brings deep insight into the challenges and excitement of pursuing entrepreneurship and the prospect of owning and operating your own business.*

### 22 Finding my Purpose to Lead with Passion

This course will help participants identify their agentic capacity to make a difference through purposeful, relational, influential leadership. We will define leadership as an influence relationship between leaders and followers around their shared purposes. Discuss how leaders and followers embrace change to achieve their shared purposes. Apply the definition of leadership and the discussion of change to real-world challenges that participants identify. Discuss elements of change leadership to support participants' sense of agentic capacity

Instructor: *Rob Elkington*

*Rob Elkington, Ph.D., is an Assistant Professor in the School of Business and Master of Management program at Trent University, Durham campus, Canada. Originally from Zimbabwe and South Africa, Rob brings a rich global perspective to his teaching and research in leadership studies. He also holds academic appointments as an Extraordinary Associate Professor at Stellenbosch University's School of Public Leadership. Rob's research explores the evolving intersection of leadership and technology, with current projects focusing on AI-driven organizational leadership, Ubuntu leadership philosophy, the application of META in military leadership development, and symbolic leadership in liminal contexts. His work also examines e-leadership in Canadian business schools, diversity facilitation through Ubuntu and the Diversity Icebreaker, and transformational leadership in data modernization within policing. Rob has authored four leadership books with Emerald Publishing, contributed five book chapters, and published numerous peer-reviewed journal articles. He is an active member of the International Leadership Association and a certified FLOW Business Coach through the International Coaching Federation.*

## The Launch Lab: From Brainstorm to Business Mogul

Ask yourself this question: "What do I want to do when I grow up?" If your answer is "become a CEO", "start a business", or "build an empire", keep reading. Whether you want to start your own venture or climb the ladder of a Fortune 500 company, this course is for you. We will cover the core functions of business, the basics of entrepreneurship and intrapreneurship, and the key steps to turning ideas into action and action into success. Along the way, you will learn how to come up with a winning idea, turn it into a money maker, and pitch it to an investor who can turn your dreams into reality. Are you ready for the Launch Lab? Let's go!

Instructor: *Dean Howley*

*Dean Howley is an award-winning educator and entrepreneur that mixes theory and real-world experience in his interactive and engaging approach to teaching and learning. He is a professor at Loyalist College in Belleville, Ontario and teaches entrepreneurship courses at Trent University in Peterborough, Ontario. Dean's business, Pigeon Lake Paddle Co., produces canoe paddle accessories and paddling themed apparel and gifts. He holds a B.B.A. from Trent University and an M.Sc. in Management from Smith School of Business, Queen's University. Dean also brings a wealth of diverse professional experience to his instruction from former positions in commercial real estate valuation, commercial financial services, tourism and recreation, and higher education.*

## Humanities and Social Science

### 31 Philosophy in the News

Philosophy in the News is a fast-paced, hands-on mini-course designed to show students that big ideas aren't trapped in dusty books, they're hiding in everyday headlines. Over three hours, we'll explore four real news stories that raise surprisingly deep questions, then break into teams to discuss, defend, revise, and sharpen our own views. No prior philosophy experience needed, just curiosity and a willingness to think out loud. We'll start with the famous banana duct-taped to a wall art scandal, a perfect spark for the philosophical question: What counts as art, and who gets to decide? From there, we'll jump to the booming trend of people using AI for therapy. If an AI can comfort you, joke with you, and "know" you, students will tackle the puzzle: Could an AI ever be a person? Next, we'll look at the mind-boggling world of modern sports contracts, including the staggering combined billion-dollar deals of Ohtani and Guerrero Jr. who faced off during the World Series. This leads naturally into the fair debate: Is it right to pay entertainers so much in a world full of need? Finally, we'll dive into self-driving car scenarios: moments when an autonomous car must choose between two bad outcomes. How should a machine make a moral decision? Throughout the course, students will learn how to explain their views clearly, challenge each other respectfully, and back up claims with reasons, the essential skills of philosophical debate. By the end, they won't just know what they think; they'll know *why* they think it.

Instructor: *Michael Hickson*

*Dr. Michael Hickson is an Associate Professor and Chair of the Department of Philosophy at Trent University. Before joining the Trent faculty, he was a Research Fellow at the University of Notre Dame in South Bend, Indiana, and an Assistant Professor at Santa Clara University in California. He has taught a wide range of courses at Trent, including Critical Thinking, Logic, Philosophy and Film, Death, The Meaning of Life, Bioethics, Cyberethics, and even a course on Conspiracy Theorists. He has also offered many courses in the Trent Enrichment program and looks forward to this opportunity to share his passion for philosophy every year. In his spare time, when he's not hanging out with his four kids, he likes to play chess, listen to classical music, meditate, exercise, and watch movies.*

### 32 Game Theory: Outsmart, Outplay, Outthink

Get ready to think like a strategist! In this interactive class, you'll explore the exciting world of game theory—learning what makes a game, how to make smart decisions in tricky situations (like the prisoner's dilemma), how to plan your moves in one-off and repeated games, and we will also look at how to think backwards. We'll connect these ideas to sports, card games, board games, school and other fun activities. It's all about learning how to outsmart, outplay, and outthink!

Instructor: *Russell Turner*

*Russell has 20 years of experience teaching economics at the college and university level, with a particular passion for environmental economics, behavioral economics, and game theory. Prior to becoming a professor, he worked with the Inter-American Development Bank in Central America, managing economic projects focused on tourism, archaeology, education, and infrastructure. Outside the classroom, Russell is an enthusiastic soccer fan and the coach of the Peterborough City U11 boys' team. He enjoys blending his love of strategy in both economics and games/sports, while making learning engaging and practical for his students.*

### 33 Mind Activities for Growth: Enhance Brain Development with Chinese Strategic Games

Get ready for an exciting challenge that will test your strategic thinking and sharpen your mind! In this dynamic course, you'll dive into the thrilling worlds of Majang (a tile game) and Chinese Chess (Xiangqi), which are fun and intellectually stimulating. Whether you're a beginner or looking to level up your skills, you'll learn the ins and outs of each game, from the basic rules to advanced strategies that will keep you on your toes. As you master the moves, you'll boost your brainpower, improve your focus, and unlock new ways of thinking. Packed with hands-on practice, and friendly competition, this course will leave you not only having fun, but also feeling more mentally sharp to take on other tasks in the field of studies.

Instructor: *Shaoling Wang*

*With a Ph.D. in Chinese Linguistics and Pedagogy, a Master's in Linguistics, and a BA in English, Dr. Shaoling Wang is a distinguished instructor and scholar for Chinese language and culture. With extensive teaching experience at top institutions, including Harvard University, Wellesley College, Middlebury College, the University of Hawaii, the University of Toronto (Scarborough Campus), and Trent University, Dr. Wang brings a wealth of knowledge and global perspective to the classroom. Known for her engaging teaching style, she inspires students to explore the intersection of language, culture, and communication, empowering them to think critically and excel in their studies. Her dedication to fostering intellectual curiosity and promoting cultural understanding makes her a standout educator in the field.*

### 34 Kickoff! Exploring Sports and the World They Shape

In this course, students will be introduced to the study of sport through a social science lens. Designed for athletes and non-athletes alike, the idea is to use sport as a doorway through which to introduce students to the concept of 'global society.' The course has been created to be engaging and interactive, with lots of group work, fun activities and opportunities for creative contributions on the part of students. Some of the major themes we will explore in this course include: 1) student's personal relationship with sport and physical activity; 2) global diversity and cultural meaning of sports around the world and 3) athlete activism and social change.

Instructor: *Greg Yerashotis*

*Greg is an Assistant Professor of Sport, Gender, Health, and Social Inclusion in the Department of Sociology at Trent University. His research and teaching focus on how sport can be used to facilitate the social inclusion of marginalized groups in Canadian society. With two decades of experience in education and youth work, Greg has worked extensively with teenagers as a youth worker with the City of Toronto, a volunteer with the Toronto District School Board, and a youth soccer coach for community organizations. He is also the founder and director of the Boundless Sport Program, a partnership between the City of Toronto, the Toronto District School Board, and Hart House at the University of Toronto. This program enriched after-school recreation through bi-weekly seminars on personal development, financial literacy, personal health, and social justice, and included an outdoor education trip focused on environmentalism. The initiative became the flagship of an award-winning youth engagement strategy at Hart House and was the subject of a recent academic study published in Sport in Society. Greg takes pride in his ability to engage young people in the classroom. His student-focused pedagogical approach has earned consistently positive reviews and a nomination for the Symons Award in Teaching. His energetic teaching style, combined with his extensive experience working with children and youth, makes him an ideal fit to lead courses!*

### 35 Do It for the Plot

Do it for the Plot gives students a fast-paced, inspiring taste of Trent's COMM 1000 – Introduction to Communication. Through an interactive lecture and hands-on workshop, students explore the six stages of communication in human history, from spoken language to AI, and discover how clarity of purpose drives learning and innovation. With captivating visuals, social media examples, and thought-provoking quotes, this course sparks curiosity, builds confidence in self-expression, and shows how communication shapes our world. It's a chance to test your curiosity, share ideas, and see why student-centered learning at Trent University makes education more relevant than ever.

Instructor: *Andrew Alexander Monti*

*Dr. Andrew Alexander Monti is a former speechwriter, provincial legislative assistant, TV news reporter, TV show host, and PR analyst who transitioned into academia. His passion for reading and studying along the lines of his genuine interests opened new windows of curiosity and opportunity, ultimately leading him to develop expertise in a subject he loves through Ontario's education system. At Trent University Durham, Dr. Monti teaches courses in the*

*Communications program, including COMM 1000 Introduction to Communications, COMM 3004 Artificial Intelligence in Communication, COMM 3001 Event Management, and COMM 4800/4801 Communications Field Placement & Internship. His research focuses on social media misinformation, and he is currently principal investigator on a SSHRC IDG-funded project in collaboration with faculty and student researchers from the Computer Science and Information Systems program. Dr. Monti's teaching effectiveness has been consistently recognized across institutions including TMU, York University, Wilfrid Laurier University, Glendon, Humber, Conestoga, and Trent Durham, where student course surveys place him in the 95th percentile. Beyond academia, Dr. Monti values his family roots. He comes from an LGBTQ family, with two dads, four siblings, and a mother who is also an educator.*

36

### **What is Science?**

Will introduce students to the philosophy of science by discussing different ways of imagining what “Science” is. We’ll emphasize that science does not happen in a void, who we are, how others see us, and what we consider “normal,” “authoritative,” or “acceptable,” all affect how we tell stories about scientific inquiry. This course will have students explore physical copies of the historic academic journal *Science*, where they will be challenged to try to read the introduction of professional articles and identify key elements, such as the topic, thesis, or whether the article describes an experiment. Learning goals include letting students see and explore what an academic article or journal is, and discuss how academic activities, including science experiments, fit into a community of knowledge production.

Instructor: *Dennis Papadopoulos*

*Dennis Papadopoulos is a philosopher who specializes in animal ethics and animal minds research, especially where that includes the formation and maintenance of animal and interspecies communities. His work often intersects with empirical animal science research and interdisciplinary research networks. It's this crossing the boundaries between science and philosophy that informs his approach to teaching philosophy of science and science literacy.*

## **STEM Programs (Science, Technology, Engineering, Mathematics)**

41

### **CSI Trent: What You Don't See on T.V.**

This forensic science-based course will cover the science behind various fields in forensic science including fingerprinting, genetics, impressions, and bloodstain pattern analysis. We will take a ‘behind the scenes’ look at how accurate your favourite crime scene T.V. shows really are by showing you how evidence is actually analysed in forensic cases. This introductory course will cover forensic science principles in a manner that is understandable by students with a very limited forensic or science background. Each topic and technique will be paired with a fun interactive activity tied to a forensic case. It will be up to students to analyse the evidence and use results to solve the case.

Instructor: *Audrey Wilson*

*Audrey is a graduate of Trent University's Forensic Science program and McMaster University's Biology Master's program, currently working as research assistant at the Natural Resources DNA Profiling and Forensic Centre based at Trent University. This position involves analyzing the genetics of a variety of Canadian wildlife species, and assisting the main forensic scientist with casework. Audrey is also a lab demonstrator for some courses in the Department of Forensic Science.*

42

### **Exploring the Magic of Chemistry**

Explore the magical world of chemistry with experiments inspired by the stories of Harry Potter. Students will get the chance to see and, in some cases, recreate some of the most iconic potions from the movies but with a real world, chemistry twist. Sorting hat potions, Giant’s Toothpaste, Troll Bogies, and Felix Felicis are just some of the amazing experiments students will get to experience when they take Magical Chemistry and they’ll come out of the course as better witches or wizards (and more knowledgeable in chemistry!). Some key concepts covered in the course include acid-base chemistry, condensation polymerization, decomposition reactions, double replacement reactions, solubility, precipitation, and more.

Instructor: *Cassandra DeFrancesco*

*Cassandra is a Chemical Technician in the Chemistry Department at Trent University and a graduate of the Environmental and Life Sciences master's program specializing in Aquatic Chemistry (2020). She received her B.Sc. in chemistry and forensic science from Trent University in 2017. She has extensive experience working in outreach,*

*having taught chemistry and forensics at the Trent Forensic Science Camp since 2015. Cassandra has been working with Trent Enrichment since 2015 having previously taught the CSI Trent: What You Don't See on TV course.*

43

### **Introduction to the Art and Science of Nursing**

This course introduces young students to nursing, emphasizing its scientific, artistic, and advocacy dimensions. Students will explore the diverse roles nurses play across various healthcare settings, gain foundational knowledge in vital signs and anatomy, and develop essential communication skills. Students will participate in interactive activities to develop an understanding of beginner nursing competencies. Students will explore various educational pathways and opportunities available in the profession.

Instructor: *Rachel Galea*

*Rachel is a faculty member in the Trent/Fleming School of Nursing and a PhD student in the Interdisciplinary Social Research program at Trent University. With a professional background in mental health nursing, she continues to practice as a Registered Nurse in Outpatient Psychiatry at Peterborough Regional Health Centre. Her career has been dedicated to advancing mental health advocacy and promoting health equity within community-based care. Rachel holds a Master of Nursing from Athabasca University, as well as two undergraduate degrees: a Bachelor of Science in Nursing from Ontario Tech University and a Bachelor of Science in Biology from Trent University. In addition, she serves on the Board of Directors at Madness Canada, contributing to education, advocacy, and research initiatives aimed at raising mental health awareness and resisting sanism.*

44

### **The Physics of Superheroes**

This course explores physics through the stories of our favourite superheroes. The idea is simple: each hero comes with a super-power, and each power hides a real scientific question. What would it take for the Flash to run at lightning speed? How strong would Spider-Man's webs have to be to stop a falling bus? Could Iron Man's suit actually fly, and how much fuel would it need? Using these examples, we introduce key physics concepts: energy, forces, momentum, power, and more at a level that is intuitive and fun. Students will estimate real numbers, compare them with what the comics show, and discover why many heroic feats would be impossible (or at least very impractical) in our universe. By the end, students will see physics not as a set of dry formulas, but as a powerful way to understand the world and to fact-check their favourite heroes.

Instructor: *Carlo Bradac*

*Dr. Carlo Bradac describes himself as a tinkerer: "I love problems that challenge my critical thinking skills and force me to find practical and effective solutions to them." Carlo is an Assistant Professor at Trent University. He studied physics and engineering at the Polytechnic of Milan (Italy) where he achieved his Bachelor (2004) and Master's degree (2006) in Engineering for Physics and Mathematics. He received his PhD in Physics at Macquarie University (Sydney, AU) in 2012. He worked as an Engineer at National Instruments (2006-2007) and at Maire Tecnimont (2007-2008), and as a Research Fellow at Sydney University (2012-2013), Macquarie University (2013-2017) and the University of Technology Sydney (2017-2020). Currently at Trent University, his research focuses on quantum materials and their applications for optics, photonics and sensing.*

45

### **There is No "Normal": Introduction to Abnormal Psychology**

This course explores unusual patterns of behaviour, emotions, and thoughts, aka. mental disorders. We will examine these disorders in connection to the brain, discuss career paths in Clinical Psychology, and delve into the fascinating history of abnormal psychology (e.g., wrongful incarceration of the innocent). We will focus on disorders commonly seen in schools and explore how the education system can support students with mental health challenges. How can you, as students, become leaders in driving positive change in schools? What does the career of a clinical psychologist look like, and how can it be both impactful and enjoyable? How are wrongful convictions made, and what can we learn from them? Along the way, you'll gain insights not just into psychology, but also into yourself!

Instructor: *Hadia Mustansir*

*Hadia holds an Honours Bachelor of Science in Psychology, specializing in Health and Well-Being, and is currently completing her Master of Science in Psychology with a specialization in Cognitive & Behavioural Neuroscience. She has more than six years of experience teaching psychology across various grades and levels, and also spent a year working as a supply teacher in elementary schools. This is her third time teaching this course, a subject she*

*approaches with deep passion and commitment. Working with neurodivergent populations is especially meaningful to Hadia, as it underscores the importance of inclusivity and understanding in education. She aspires to become a clinical neuropsychologist, a discipline that explores the relationship between the brain and behaviour, including cognitive and emotional functions. Alongside her teaching, her research focuses on stress and its impact on memory and learning. Hadia strives to make her lectures engaging and enjoyable, ensuring students leave with valuable knowledge without feeling stressed. Outside of academia, she enjoys traveling, attending conferences, going on adventures, and continuing to learn about the brain.*