

CREATIVITY AND INNOVATION CERTIFICATE

Overview

In today's ever-changing and competitive economic landscape, creativity and innovation are prerequisites not only for success but for survival at the organizational level and job marketability at the individual level. The ability to adapt to change and deal with uncertainty and constraints creatively becomes critical for securing a good entry job and subsequently becoming successful in the workplace.

The proposed certificate aims to develop an important skillset in Rider students, namely, thinking and acting creatively, whether for problem-solving or innovation purposes. More generally, it aims to better prepare the students to navigate uncertain and ever-changing environments and to rise to these challenges in their professional careers.

Certificate Offered

- Certificate in Creativity and Innovation

Contact

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Requirements for the Creativity and Innovation Certificate

(11-12 credits)

Code	Title	Credits
Required Courses		
Select one of the following:		3
PSY 100	Introduction to Psychology	
PSY 102	Explorations in Psychology Honors	
PSY 110	Psychology: The Science of Well-being	
PSY 117	Psychology of Creativity	
PSY 210	Organizational Psychology	3
PSY 367	Creativity and Innovation	3
Elective Course (2-3 credits)		2-3
Select from the following:		
Any course with the designation *490 Independent Research and Study		
Any course from among the following pre-approved Creativity and Innovation electives:		
ART 150	Digital Foundations	
BHP 251	Idea to Innovation	
BHP 252	Creativity and Design Thinking	
BHP 307	Presence of Mind – Artificial Intelligence and Human Creativity	
CIS 388	Design Thinking	
ENG 206	Introduction to Creative Writing	

ENG 245	Creativity
ENG 303	Creative Writing: Poetry
ENG 304	Creative Writing: Fiction
ENG 305	Creative Writing: Nonfiction
ENG 306	Creative Writing: Drama
ENG 311	Creative Writing: Playwriting
ENT 100	Innovation and Entrepreneurship
IND 133	Creativity: Edu & Psych Persp
ME 592	Creativity & Music Technology
PSY 324	Play and Imagination
THE 118	Visual Imagination
Any internship experience or 2-3 credit course not listed above that has a strong, demonstrable creativity/creative problem solving/innovation component, as approved by the Program Chair.	

Total Credits

11-12

Courses and Descriptions

PSY 100 Introduction to Psychology 3 Credits

This course covers major facts, principles and concepts about human and animal behavior and experience, research findings, major problems, basic vocabulary, methodologies, and contributions in the field. Topics include psychology as a science; human development; individual differences; intelligence and its measurement; special aptitudes and interests; personality and social behavior; motivation and emotion; frustration and personality deviations; and learning, thinking, remembering and forgetting.

PSY 102 Explorations in Psychology Honors 3 Credits

The course introduces the history of psychology, and demonstrates how the discipline is a science. It provides students with experience exploring the mind, behavior, and the relationship between the two, from multiple perspectives, including biological, behavioral, cognitive, developmental, humanistic, social, and abnormal. It tackles questions including (but not limited to) how different areas of the brain are involved in behavior and are affected by injury, how humans sense and perceive the world, how states of consciousness differ from one another, how humans learn, remember, communicate, and develop, what motivates humans to behave in particular ways, how social groups affect behavior and decision-making, and what happens when behavior and emotions deviate from what is typical.

PSY 110 Psychology: The Science of Well-being 3 Credits

This course uses theory and methods of psychology to examine the question: How to make a good life? Students will learn how psychology examines the ways that motivation, intellect, relationships, self-respect and a healthy lifestyle contribute to happiness, well-being, and flourishing. Students will learn how psychology examines human nature through observation and experimentation. Students will understand how psychology applies research to improve human well-being. Students will leave the course with a better understanding of themselves and their connection to others, and apply their self-knowledge to their personal goals and relationships. This course counts towards the fulfillment of the Disciplinary Perspectives element of the CAS general education curriculum.

PSY 117 Psychology of Creativity 3 Credits

Is creativity reserved only for geniuses, or can ordinary individuals also be creative? Is it domain-specific or domain-general? How do we measure it? What is the connection between creativity and innovation? Can you and I become more creative, and if so, what factors influence creative thinking? This course surveys the modern theories of creativity and problem solving from a psychological perspective, and their applications to real-world challenges. Specific topics will focus on convergent and divergent thinking, the role of constraints, change, and motivation in creativity, social and personality factors, techniques such as brainstorming, design thinking, and creative problem solving, and innovation in organizations. You will apply what you have learned in hands-on activities that challenge you to propose creative solutions to real-world problems.

PSY 210 Organizational Psychology 3 Credits

Focuses on issues related to human behavior in work settings. Topics include personnel issues such as hiring and promotion decisions, performance appraisals, and methods of on-the-job training. Issues of job satisfaction, motivation, productivity, and effective leadership styles are also examined. Finally, organizational structure as it relates to communication within organizations will be examined.

Prerequisite(s): PSY 100 or PSY 102 or PSY 110 or PSY 131.

PSY 367 Creativity and Innovation 3 Credits

What is creativity, and how do we measure, study, and enhance it? This course will survey the modern theories of creativity from a psychological perspective, with an emphasis on the processes that underlie creative thinking and the variables that influence creative idea generation. Specific topics will include: convergent and divergent thinking, the role of the unconscious in creative ideation, flow and mindfulness, individual and group creativity, techniques such as brainstorming and creative problem solving, the neuroscience of creativity, the role of motivation, and creativity and innovation in organizations. Discussions of theoretical findings will be complemented by in-class activities and assignments that highlight applications to day-to-day living and to larger-scale challenges that require creativity and innovation.

Prerequisite(s): (PSY 100 or PSY 102 or PSY 110 or PSY 131) and 45 credits.

PSY 490 Independent Study: Research and Creative Expression 1-4 Credits

Provides students with an opportunity to design and carry out original research in an area of their choice. Students designate a faculty supervisor and work closely with him/her during the semester. All students must have approval from the department and the dean to register for PSY 490.

Prerequisite(s): (PSY 100 or PSY 102 or PSY 110 or PSY 131) and PSY 201 and 75 credits.

ART 150 Digital Foundations 3 Credits

Industry standard digital tools are used to explore the basic concepts of composition, form, texture, value, and color in two-dimensional design. Further consideration of digital formats and technologies in the visual arts will be highlighted.

BHP 251 Idea to Innovation 3 Credits

The pharmaceutical industry comprises an incredibly diverse team of thinkers, including accountants and biochemists, who are all on a quest to improve human health. The development of medical treatments relies on pivotal insights from the scientific laboratory, but turning these ideas into practical medical innovations requires the solving of many problems outside of the scientific field. Through the examination of historical and contemporary case studies, this course will investigate the nature of science as it is practiced in the real world. How are problems identified and ideas generated and refined? What political and sociological challenges does the industry encounter? Who pays for all of this? By exploring growth in the pharmaceutical industry from the inside, students in this class will gain a deeper understanding of both science and business and how these disciplines interact in order to enhance and extend human life.

BHP 252 Creativity and Design Thinking 3 Credits

Creative, interdisciplinary, and collaborative work is being recognized as increasingly important for innovation and solving global problems of the 21st century. This course will introduce students to a much-needed framework for dealing with unstructured problems for creative problem solving, and a process for innovation. The course consists of two related parts: the psychology of creativity provides a foundational basis of knowledge and discussion, and the design thinking framework serves as an example of a powerful creative thinking strategy that an increasing number of individuals and organizations have used successfully over the past decade.

Prerequisite(s): BHP 100 or CMP 120; non-BHP students POI only.

BHP 307 Presence of Mind – Artificial Intelligence and Human Creativity 3 Credits

What is Artificial Intelligence (AI)? In what ways can computers “think”? How is their “thinking” similar to and different from that of humans? Through readings, lectures, discussions, and creative projects, students will investigate evidence of intelligence and creativity in various disciplines including music composition, art, and human and non-human systems. We will examine historical precedents and ponder likely developments in this area in the twenty-first century. No prior experience with computers or music is required.

CIS 388 Design Thinking 3 Credits

This undergraduate course on Design Thinking provides students with a framework for dealing with unstructured problems to create innovative business solutions. Students in this course will learn about the complex and iterative process of design thinking and its several phases, including problem finding, observation, visualization and sense making, ideation, prototyping and testing, and explore the value of design thinking for creating business solutions with lasting impact. Students who have earned credits for CIS 388 or equivalent cannot take PMBA 8352 for credit.

Prerequisite(s): JR/SR, 54+ credits, or POI.

ENG 206 Introduction to Creative Writing 3 Credits

A workshop that introduces students to basic conventions and techniques of creative writing. Students will read and study published writing in multiple genres, such as short fiction, drama, poetry, and creative nonfiction, and write and revise their own creative pieces.

ENG 245 Creativity 3 Credits

This course is an introduction to the history of literary creativity and the related topics of invention, genius, imagination, and originality. It examines theories of literary creativity throughout history from ancient ideas about the origins of inventiveness to recent theories. It looks at select works in English and other sources, and it looks at the subject of creativity in poetic, prose, and dramatic works.

Prerequisite(s): English Literature majors should take all Gateway Courses before they take 300- and 400- level courses.

ENG 303 Creative Writing: Poetry 3 Credits

A workshop analyzing the techniques of poetic expression, with a focus on the student's original experiments in traditional and contemporary verse forms.

Prerequisite(s): completion of composition requirements or permission of instructor.

ENG 304 Creative Writing: Fiction 3 Credits

Students write original fiction and analyze the techniques of writing fiction in discussion of both their own drafts and published examples of the form.

Prerequisite(s): completion of composition requirements or permission of instructor.

ENG 305 Creative Writing: Nonfiction 3 Credits

A workshop in Creative Nonfiction (aka Literary Nonfiction or Narrative Nonfiction, abbreviated CNF) in which students will write and read different forms of memoir and essay, including Personal Essay, Lyric Essay, Travel Writing, Oral History, and Personal Profiles. Creative Nonfiction (CNF) tells true stories using the literary techniques of fiction-writing, such as building dramatic scenes, establishing suspense, and developing a narrative sequence of events, or plot. CNF employs vivid sensory detail and builds characters and scenes to enhance the reader's experience of the story. Challenging the traditional journalist's stance of objectivity and emotional distance from her topics, CNF writers often put themselves into their stories to create a voice of reflection. We'll talk about what types of creative license CNF gives writers, and also about the ethics of storytelling, especially when your story's characters are real, living people.

Prerequisite(s): completion of composition requirements or permission of instructor.

ENG 306 Creative Writing: Drama 3 Credits

Examines cultural developments in the United States from the late 19th century to the present. Topics include popular culture, intellectual history, gender history, literary history, film, institutions like museums and department stores, subcultures and countercultures, popular commemorations like World's Fairs, and political culture. Some of the largest trends explored include the development of the modern culture of consumption, the urban landscape, and the polarization of cultural values.

ENT 100 Innovation and Entrepreneurship 3 Credits

This course provides students with an introduction to creativity, innovation, and the concept of an entrepreneurial mindset. Students explore the excitement and challenges faced by individuals and businesses as they create, develop, and evaluate innovative business opportunities. We also discuss the probable paths of career development for students pursuing entrepreneurship. In this course, students evaluate their own views of innovation and entrepreneurship within the framework of entrepreneurial thinking, and putting this mindset into action.

IND 133 Creativity: Edu & Psych Persp 3 Credits

This course will examine both psychological and educational research about creativity. It will consider the various definitions of creativity that have guided research and theory; compare current theories of creativity in the fields of education and psychology, including cognitive, personality, and motivational theories; review research regarding what has been termed the "dark side" of creativity, including possible links to mental illness; and consider if and how schools and colleges might include creativity in admissions and promote creativity among students.

ME 592 Creativity & Music Technology 2 Credits

Creativity and Technology in the Music Classroom is designed to prepare students to foster musical creativity using a variety of approaches and tools. In particular, students will use equipment such as digital audio workstations, MIDI controllers, microphones, and SmartBoards to facilitate rich and engaging creative experiences. Students will explore ways to structure learning experiences in response to the needs and interests of students, and will examine current thinking and trends related to the uses of creativity and technology in the music classroom.

Prerequisite(s): Junior status or permission of instructor.

PSY 324 Play and Imagination 3 Credits

This course surveys two of the most important manifestations of children's imagination: pretend play and imaginary companions. It will discuss the evolution of play, the purpose of play, the role of play in the development of creativity, and individual differences in play (e.g., among children of different gender, cultures, and ability levels). Finally, it will discuss the application of play to therapeutic methods for children.

Prerequisite(s): (PSY 100 or PSY 102 or PSY 110 or PSY 131) and 45 credits.

THE 118 Visual Imagination 3 Credits

Introduction to the visual world of theater design. Visual examples, physical exercises and handcraft of composition and style, with dramatic input and meaning. The course explores how to translate ideas in a dramatic text into a visual context.