MEd
in Curriculum & Instruction:
Science (PreK-12)
Founded in 1905, Concordia University–Portland is an accredited, nonprofit, Christian university committed to sharing our Lutheran values of open discourse, intellectual inquiry, justice, compassion, diversity, and inclusion to prepare leaders for the transformation of society.

Concordia University’s College of Education is one of the most respected names in learning today, empowering educators who are resilient, serve with compassion, and impact lives beyond the classroom. We teach our students how to help their students find their voice. Part of an active, connected network of 20,000 College of Education alumni, Concordia-trained professionals continue to change the world, student by student.

If you’re passionate about next-generation learning, Concordia is the university leading the way and shaping the future of education.
The MEd in Curriculum & Instruction: Science (PreK-12) program allows you to enhance your science knowledge and hone your skills as a teacher of foundational science concepts. With an emphasis on the Next Generation Science Standards (NGSS) and the standards of the National Science Teachers Association (NSTA), this program addresses inquiry methods for teaching science. You’ll integrate technology to enrich science learning in the preschool through grade 12 science core curriculum and virtual laboratory experiences.

In addition to meeting the objectives and requirements for the MEd in Curriculum & Instruction: Science (PreK-12) degree program, successful candidates will also demonstrate:

- Expertise in the utilization of new methods of authentic assessment and strategies as tools to evaluate student learning progress in relation to Oregon’s Common Core State Standards and specific district standards
- Effective instructional skills in planning, implementing, and assessing instruction in settings that include diverse cultural populations and special needs students
- An understanding of the ways that the specific curricular/instructional area has the potential to be responsive to classroom diversity
- A clear understanding of the moral leadership required of them as advanced scholars in the chosen area of curriculum and instruction
- The ability to modify instructional plans and promote alternative goals and strategies when necessary, particularly in relation to assessment results

**LET’S CHAT**

**CALL:** 1-888-986-8148  
**APPLY ONLINE:** education.cu-portland.edu/apply  
**QUESTIONS:** education.cu-portland.edu  
**EMAIL:** admissions@education.cu-portland.edu
**CORE COURSES**

**EDGR 502**  
Developing Character Through the Curriculum  
3 credits

**EDGR 535**  
Theories of Teaching and Learning  
3 credits

**EDGR 595**  
Community of Learners  
3 credits

**EDGR 602**  
Contemporary Educational Thought  
3 credits

**CONCENTRATION COURSES**

**EDCI 527**  
The Nature of Science  
3 credits

**EDCI 537**  
Planning for an Inquiry-Based Classroom  
3 credits

**EDCI 547**  
Transformative Science in the Differentiated Classroom  
3 credits

**EDCI 557**  
The Technology-Based Science Classroom  
3 credits

**RESEARCH COURSES**

**EDGR 601**  
Educational Research  
3 credits

**EDGR 698**  
Action Research (capstone)  
3 credits

**EDGR 696**  
Practitioner Inquiry (capstone)  
3 credits

**SELECT ONE CAPSTONE COURSE**
COURSE DESCRIPTIONS

Concordia University-Portland’s Master of Education in Curriculum & Instruction: Science (PreK-12) is a 30 credit-hour degree program.

CORE COURSES

EDGR 502  
Developing Character Through the Curriculum  
3 credits

This course will provide teachers with the resources and skills necessary to integrate character themes and character development into their school curriculum. Course provides a forum in which to discuss and develop one’s own moral perspectives on the basis of generally accepted criteria.

EDGR 535  
Theories of Teaching and Learning  
3 credits

This course is designed to provide leaders with the latest psychological research about learning and guide them in exploring ways to directly apply these precepts to their current work setting. Topics include cognitive science, learning theory, and relevant teaching theories that utilize this information. The course fuses the latest biological and psychological understanding of how the brain learns so candidates can harness this knowledge and apply it directly to learning situations.

EDGR 595  
Community of Learners  
3 credits

Course challenges candidates to confront the tremendous diversity in their current environment and develop strategies to build community in the midst of the social, ethnic, economic, and alternative lifestyle differences that permeate today’s 21st century workplace. Course stresses the critical importance of creating community in the workplace and illustrates how that community can generate an efficient, supportive, and positive workplace.

EDGR 602  
Contemporary Educational Thought  
3 credits

Candidates identify, review, and analyze major trends and issues impacting the contemporary state and national educational scenes. Each class session provides students with an opportunity to evaluate the advantages and liabilities of current educational reforms and issues from the perspective of prevailing educational research as well as from their own personal beliefs and current work environment. Candidates will also consider how they can impact and influence change in their own workplace.
CONCENTRATION COURSES

This course focuses on a view of science as a framework for understanding the natural world. Participants learn about the sciences through a systematic gathering of information using various forms of direct and indirect observation and the testing of this information by building and applying investigation skills. Participants also investigate their biases and prejudgments about teaching and learning science and conduct an expansive but sophisticated study of natural laws and theories.

This course emphasizes the need for learners to view themselves as scientists and as such to engage in raising questions, carrying out investigations, communicating methods, proposing explanations and solutions, using observation, and analyzing science practices. The course will address planning for instruction, setting goals, teaching to standards, meeting curricular requirements, and teaching developmentally with a focus on student inquiry and knowledge construction as the basis for teaching and learning.

The focus of this course is to teach science using transformational teaching and learning strategies that are focused on meeting the needs of all learners through a developmental, constructivist approach. There will be an emphasis on differentiation in all aspects of the learning environment: setting up the classroom, getting to know the learners, assessing learning styles and needs, differentiating teaching strategies, the iterative process, and providing personalized anchor activities to solidify learning.

Course focuses on the use of educational technology to transform science education through enhancing critical thinking and problem-solving skills in children using technology as inquiry-based learning tools in ways similar to those of practicing scientists. The use of Internet images, virtual science labs and field trips, simulations, digital microscopes and digital cameras, multimedia packages, global information systems, science computer databases, and computer-based laboratories are examples of the resources studied and applied in this class.
Attending Concordia Portland was the best investment I made in my education, and for my future. I am grateful for the ongoing support and the encouragement I’ve received.

-KIMBERLY CALLAHAN ’17, MEd in C&I: SCIENCE

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This course provides students with the basic competencies necessary to understand and evaluate the research of others, and to plan their own research with a minimum of assistance. This course includes the basics of both qualitative and quantitative research.

The Master of Education culminates with the choice of either EDGR 698-Action Research or EDGR 696-Practitioner Inquiry. Either option provides candidates with an understanding of the role of research in the field of education as a tool to solve problems and as a way to improve student learning.

**EDGR 601**
Educational Research
3 credits

Candidates will learn more about the action research methodology, complete final edits of the literature review, and design a complete action research proposal including data collection methods and analysis approaches. During this course, the proposal will not be implemented with students/participants. This design provides candidates with the requisite skills and means to pursue the transformative practice called Action Research in their classroom, school, district or other work environment.

*Prerequisite: Successful completion of EDGR 601 Educational Research*

**EDGR 698**
Action Research (capstone)
3 credits

**EDGR 696**
Practitioner Inquiry (capstone)
3 credits

Practitioner Inquiry focuses on the reflective acts of the candidate as an educator seeking to improve teaching practice. Premised on the self-study research methodological traditions, Practitioner Inquiry provides the opportunity to reflect on teaching practice and generate improvements based on classroom observation. Practitioner Inquiry is focused on the educator and her/his own practices, developing skills of inquiry, observation, reflection, and action in teachers.

*Prerequisite: Successful completion of EDGR 601 Educational Research*
**ADMISSION REQUIREMENTS**

**U.S. CITIZENS OR PERMANENT RESIDENTS**

Completed online application:
education.cu-portland.edu/apply

Applicants must have earned a bachelor’s degree or higher from a regionally accredited institution

Official transcripts from a regionally accredited college/university with posted bachelor’s or master’s degree. For your convenience, please sign the transcript release form if you would like Concordia University-Portland to request official transcripts on your behalf.

Work History Form

Applicants must have a cumulative undergraduate GPA of 2.8 or higher*

Statement of Intent that addresses the following:

- Briefly introduce yourself to the Graduate Admissions Office and College of Education teams by discussing your professional background and your interest in pursuing a Master of Education at Concordia. (~75–100 words)
- Describe your professional goals and their alignment with your chosen program and to Concordia’s overall mission. Illustrate how your strengths and experiences have prepared you for success in the program. (~200–250 words)
- Discuss an immediate, real-world challenge in the professional field to which your degree aligns (e.g. PK-12 education, higher education, corporate training). Provide an example. What action should educators or professionals take to address this challenge? (~200–250 words)
- For candidates who earned under a 2.80 GPA, please explain what led to the low GPA and how you will succeed in an academically challenging graduate program today.

*Standard admission may be granted to students who meet all the admission requirements of the specific program to which they are applying. Conditional admission may be granted to students who do not meet specific admission requirements; however, additional material and documentation will be requested. GPA and other criteria vary by degree program; please review the specific requirement listed and contact an Enrollment Specialist if you have additional questions or need more information.
International students (anyone who is not a U.S. citizen or permanent resident) will need to fulfill the following requirements to be considered for admission into any of our online programs.

**The same requirements as U.S. citizens/permanent residents, plus the following additions:**

Proof of a bachelor’s or master’s degree that is recognized by the Ministry of Education from that country and that is equivalent to a bachelor’s or master’s degree in the United States.

Your university or college transcripts will need to be evaluated by an approved transcript evaluation partner to assess equivalence to a degree from the U.S.

Proof of English proficiency may be fulfilled by a required writing sample. The English proficiency requirement may be waived if a student attended their last two years of undergraduate schooling in the United States, Canada (English-speaking provinces), the United Kingdom, Australia, New Zealand, Ireland, and/or South Africa. Students born in one of these countries, yet educated elsewhere, are still required to satisfy the English proficiency requirement. If the writing sample does not prove a sufficient mastery of English, the student may be asked to submit scores from the TOEFL or ILETS exams.

International students enrolled in an online program will not be issued an I-20 from Concordia University-Portland and will not be eligible to receive an F-1 student visa to study in the United States.
MEd in Curriculum & Instruction: Science (PreK-12) | 10/24/19