



Mallinson Institute for Science Education Courses for Master of Arts in Science Education

		2019 / 2020				2020 / 2021				2021 / 2022				2022 / 2023			
All listed courses are 3 credits		Fall	Spr	S1	S2	Fall	Spr	S1	S2	Fall	Spr	S1	S2	Fall	Spr	S1	S2
Science Education	*SCI 6145 Intro to History and Philosophy of Science for Teachers		■			■					■			■			
	*SCI 6155 Sci Ed: Historical/ Philosophical Perspectives for Teachers	■					■			■					■		
	*SCI 6165 Cognition and Teaching		■			■					■			■			
	*SCI 6260 Curriculum Studies in Science Education			■				■				■				■	
	SCI 7000/7100 Thesis/Project (by arrangement)	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
Science Content	SCI 5600 Integrated Science				■			■		■					■		
	SCI 5700 Cell Biology: Structures and Functions	■											■				
	SCI 5700 General Biology: Organisms and their Environments						■									■	
	SCI 5800 Chemistry: Building on the Theory of the Atom		■									■					
	SCI 5800 Chemistry: Applications to Life, Industry, and Environment					■											■
	SCI 5850 Physics: Motion, Force, and Energy	■											■				
	SCI 5850 Physics: Matter, Waves, and Light						■									■	
	SCI 5900 Earth Science: Land and Water Systems							■							■		
	SCI 5900 Earth Science: The Atmosphere and Space				■					■							
	SCI 6210 Astronomy for Teachers								■					■			
SCI 6210 Evolution for Teachers			■								■						
College Science Teaching Certificate <small>(courses [with hybrid option] that can count toward MA)</small>	SCI 6185 How to Teach Science		■								■						
	SCI 6186 College Science Curriculum and Assessment					■								■			
	SCI 6187 The Theory and Practice of College Science Teaching						■								■		

Mallinson Institute for Science Education Course Requirements for M.A. in Science Education

Science Education 12 credits (required core)	Science Content 12-18 credits	Electives 0-6 credits
<p>SCI 6145 Introduction to History and Philosophy of Science *</p> <p>SCI 6155 Science Education: History and Philosophy *</p> <p>SCI 6165 Cognition and Teaching *</p> <p>SCI 6260 Science Curriculum</p>	<p>Science content courses at 5000-6000 level with the following prefixes:</p> <p>SCI Science Education</p> <p>BIOS Biological Sciences</p> <p>CHEM Chemistry</p> <p>PHYS Physics</p> <p>GEOG Geography</p> <p>GEOS Geological and Environmental Sciences</p>	<p>3-6 elective credits (with advisor approval)</p> <p>or</p> <p>6 credits of SCI 7000 (thesis)</p> <p>or</p> <p>3-6 credits of SCI 7100 (independent project)</p>
Total: 30 credits		

At least 15 of the 30 credits must be at 6000 level or above.

Up to 6 credits at the graduate level may be approved for transfer from another institution.

* The three courses listed below are offered as traditional classroom courses at the WMU Main Campus, and may be used in place of the corresponding online courses:

- SCI 6140 History and Philosophy of Science
- SCI 6150 History and Philosophy of Science Education
- SCI 6160 Models of Teaching and Learning