

*Welcome to the Geography and Geology Department at Western Kentucky University
M.S. Geoscience Program*

Semester-by-Semester Checklist for the M.S. Geoscience Program - Effective Fall 2016
Physical Geoscience Research Focus

Course	Credits	Semester /Faculty	Course	Credit	Semester /Faculty
Fall Semester Year 1			Spring Semester Year 1		
GEOS 500 Research Methods	3		GEOS 500 Research Methods - Proposal	1	
GEOL 415G Env. Geology	3		GEOS 502 Field Tech	1	
GEOS 566 Karst Geoscience	3		GEOS 520 Spatial Tech	4	
			GEOS 527 Water Resources	3	
HOURS	9			9	
Fall Semester Year 2			Spring Semester Year 2		
GEOS 555 Climate Change	3		GEOS 599 Thesis Research	3	
GEOS 521 Geomorphology	3				
GEOS 599 Thesis Research	3				
HOURS	9			3	

- Required courses are GEOS 500 (4), 520 (4), 502 (1), and 599 (6) = 15 hours
- Elective courses are advisor-approved graduate courses in the research area = 15 hours
- GEOS 595 Teaching Practicum can be substitute in Year 1 Spring semester if the student wishes to teach as a GTA in the following academic year.

Notes:

Cultural Geoscience Research Focus

Course	Credits	Semester /Faculty	Course	Credit	Semester /Faculty
Fall Semester Year 1			Spring Semester Year 1		
GEOS 500 Research Methods	3		GEOS 500 Research Methods - Proposal	1	
GEOS 580 Urban Analysis	3		GEOS 502 Field Tech	1	
GEOG 540 Regional Geog	3		GEOS 520 Spatial Tech	4	
			GEOS 525 Political Geog	3	
HOURS	9			9	
Fall Semester Year 2			Spring Semester Year 2		
GEOG 452G Kentucky	3		GEOS 599 Thesis Research	3	
GEOS 523 Urban GIS Apps	3				
GEOS 599 Thesis Research	3				
HOURS	9			3	

- Required courses are GEOS 500 (4), 520 (4), 502 (1), and 599 (6) = 15 hours
- Elective courses are advisor-approved graduate courses in the research area = 15 hours
- GEOS 595 Teaching Practicum can be substitute in Year 1 Spring semester if the student wishes to teach as a GTA in the following academic year.

Notes:

Geographic Information Science Research Focus

Course	Credits	Semester /Faculty	Course	Credit	Semester /Faculty
Fall Semester Year 1			Spring Semester Year 1		
GEOS 500 Research Methods	3		GEOS 500 Research Methods - Proposal	1	
GEOS 575 GIS Analysis	3		GEOS 502 Field Tech	1	
GEOS 523 Urban GIS Apps	3		GEOS 520 Spatial Tech	4	
			GEOS 576 GIS Programs	3	
HOURS	9			9	
Fall Semester Year 2			Spring Semester Year 2		
GEOS 577 GIS Topics	3		GEOS 599 Thesis Research	3	
GEOS 515 Remote Sensing	3				
GEOS 599 Thesis Research	3				
HOURS	9			3	

- Required courses are GEOS 500 (4), 520 (4), 502 (1), and 599 (6) = 15 hours
- Elective courses are advisor-approved graduate courses in the research area = 15 hours
- GEOS 595 Teaching Practicum can be substitute in Year 1 Spring semester if the student wishes to teach as a GTA in the following academic year.

Notes:

Environmental Geoscience Research Focus

Course	Credits	Semester /Faculty	Course	Credit	Semester /Faculty
Fall Semester Year 1			Spring Semester Year 1		
GEOS 500 Research Methods	3		GEOS 500 Research Methods - Proposal	1	
GEOS 566 Karst Geoscience	3		GEOS 502 Field Tech	1	
GEOL 415G Env. Geology	3		GEOS 520 Spatial Tech	4	
			GEOS 527 Water Resources	3	
HOURS	9			9	
Fall Semester Year 2			Spring Semester Year 2		
GEOS 555 Climate Change	3		GEOS 599 Thesis Research	3	
GEOS 571 App Nat Resrce	3				
GEOS 599 Thesis Research	3				
HOURS	9			3	

- Required courses are GEOS 500 (4), 520 (4), 502 (1), and 599 (6) = 15 hours
- Elective courses are advisor-approved graduate courses in the research area = 15 hours
- GEOS 595 Teaching Practicum can be substitute in Year 1 Spring semester if the student wishes to teach as GTA in the following academic year.

Notes:

Climate Geoscience Research Focus

Course	Credits	Semester /Faculty	Course	Credit	Semester /Faculty
Fall Semester Year 1			Spring Semester Year 1		
GEOS 500 Research Methods	3		GEOS 500 Research Methods - Proposal	1	
GEOS 539 Atmos Models	3		GEOS 502 Field Tech	1	
GEOS 515 Remote Sensing	3		GEOS 520 Spatial Tech	4	
or GEOS 510 Research			GEOS 537 Mesoscale	3	
HOURS	9			9	
Fall Semester Year 2			Spring Semester Year 2		
GEOS 531 Dynamic I	3		GEOS 535 Dynamic II	3	
GEOS 522 Phys Clim	3		GEOS 599 Thesis Research	3	
GEOS 599 Thesis Research	3				
HOURS	9			6	

- Required courses are GEOS 500 (4), 520 (4), 502 (1), and 599 (6) = 15 hours
- Elective courses are advisor-approved graduate courses in the research area = 15 hours
- GEOS 595 Teaching Practicum can be substitute in Year 1 Spring semester if the student wishes to teach as GTA in the following academic year.
- Students with a B.S. Meteorology degree have more flexibility and each will have a different program of study, while those seeking NWS certification without a Meteorology B.S. will need to take all of the METR courses in sequence and will end up with more than 30 hours.

Notes: