	Every Year		Even Years		Odd Years			
ALL GEOGRAPHY AND GEOLOGY CLASSES	Fall	Winter	Summer	Fall	Winter	Fall	Winter	Irregular
ESSC 101 Weather and Forecasting						Χ		
ESSC 105 Climate Change in Human Times	Х	Х	Х					
ESSC 107 Introduction to Environmental Science	Х	Х						
ESSC 108 Earth Science for Non-Science Majors	Х	Х	Х					
ESSC 109 Earth Science lab for Non-Science Majors	Х	Х	Χ					
ESSC 110 The Dynamic Earth System	Х	Х	Χ					
ESSC 111 The Earth System Through Time	Х	Х						
ESSC 114 Geology of National Parks			Χ					
ESSC 120 Dinosaurs, Mammoths, and Trilobites								Х
ESSC 202 Earth Science for Elementary Teachers	Х	Х	Χ					
ESSC 208 Natural Environmental Hazards		Х						Х
ESSC 212 Weather, Climate, and the Earth System	Х	Х						
ESSC 227 Topographic Maps		Х						
ESSC 228 Mineralogy	Х							
ESSC 229 Rocks and Minerals		Х						
ESSC 300 Introduction to Hydrology	Х	Х	Χ					
ESSC 303 Field Geography								Х
ESSC 307 Essentials of Oceanography for Elem. Teachers								Х
ESSC 311 Weather and Climate for Elementary Teachers	Х	Х						Х
ESSC 312 Essentials of the Geosphere for Elem. Teachers	Х							
ESSC 315 Water and the Environment of Elem. Teachers								Х
ESSC 320 Oceanography	Х	Х						
ESSC 324 Weather				Χ				
ESSC 325 Geomorphology		Х						
ESSC 326 Structural Geology	Х							
ESSC 327 Soil Science								Х
ESSC 329 Igneous and Metamorphic Petrology					Χ			
ESSC 330 Sedimentology and Stratigraphy							Χ	
ESSC 331 Paleontology	Х							
ESSC 347 Methods for Teaching Secondary Earth Science		Х						
ESSC 370 Glacial and Quaternary Geology				Χ				
ESSC 406 Nature of Science						Χ		
ESSC 407 Nature of Science for Elementary Teachers				Χ				
ESSC 422 Environmental Geochemistry							Χ	

ESSC 424 The Global Climate System							Х
ESSC 425W Severe and Unusual Weather						Х	
ESSC 430 Petroleum Geology				Х			
ESSC 448 Hydrogeology					Х		
ESSC 450 Lake and Coastal Processes							Х
ESSC 466W Global Tectonics	Х						
ESSC 485 Introduction to Remote Sensing		Х					
ESSC 495 Environmental Assessment and Planning							
GEOG 100 Intro to Geospatial Science and Technolgy	Х	Х	Χ				
GEOG 107 Intro to Geography	Х	Х	Х				
GEOG 110 World Regions	Х	Х	Х				
GEOG 111 Regions and Resources							Х
GEOG 112 Intro to Travel and Tourism	Х						
GEOG 115 Observing The Human Landscape							Х
GEOG 150 Thinking Sustainably	Х	Х	Х				
GEOG 212 Geography of Travel and Tourism		Х					
GEOG 276 Pricinples of Geographic Information Systems	Х	Х	Х				
GEOG 311 History and Geography of Modern Worlds	Х						
GEOG 313 Geography of Michigan	Х	Х	Χ				
GEOG 314W Geography of Russia and Neighboring States	Х	Х					
GEOG 315 Travel and Tourism: European Scene		Х					
GEOG 318 Geography of Asia		Х					
GEOG 319 Geography of Europe	Х						
GEOG 320 Geography of US and Canada	Х	Х	Χ				
GEOG 321 Geography of Latin America		Х					
GEOG 322 Geography of Africa	Х						
GEOG 332 Urban Geography	Х						
GEOG 333 Unsettled Geographies	Х	Х					
GEOG 335 Economic Geography	Х						
GEOG 336 Tourism and Socio-Economic Development							Χ
GEOG 345 Geography of Resorts							Χ
GEOG 348 Teaching Social Studies for Elementary School	Х	Х					
GEOG 360 Cultural Geography		Х					
GEOG 361 Geography of Population				Х			
GEOG 376 Spatial Analysis	Х						
GEOG 405 Aerial Photography Interpretation	Х						
GEOG 441 Transportation Geography and Planning	Х						
GEOG 445 Cultural Tourism Resources	Х						

GEOG 446 Heritage Interpretation		Х					
GEOG 476 Geodatabases and GIS Client Applications	Х						
GEOG 480 Geographic Information Systems Project					Х		
GEOG 484 GIS Customization and Programming		Х					
GEOG 505 Seminar in Methods and Research	Х						
GEOG 509 Geodatabases for Enterprise GIS	Х						
GEOG 520 GIS Introduction for Educators							Х
GEOG 531 American Cultural Landscapes		Х	Х				
GEOG 541 Material Cultures Studies: Learning From Objects		Х					
GEOG 549 Cultural Landscape Interpretation	Х						
GEOG 571 Teaching of Social Studies	Х	Х					
GEOG 575 Interpretation of Aerial Photography	Х						
GEOG 579 Geographic Information Systems	Х	Х	Х				
GEOG 581 Advanced Enviornmental Assessment	Х						
GEOG 582 Remote Sensings of Eath Resources		Х					
GEOG 583 Cartographic Design		Х					
GEOG 584 Visual Programming of GIS Customization		Х					
GEOG 585 Geographic Information Systems Applications	Х						
GEOG 639 Continuous Enrollment		Х					
GEOG 668 GIS Project		Х					
GEOG 670 Spatial Analysis and Modeling	Х						
GEOG 678 Advanced Desktop Programming for GIS Customization	Х						
GEOG 683 Field Studies In Michigan							X
GHPR 335 Historic Preservation	Х						
GHPR 401 Planning/Preservation Graphics	Х						
GHPR 475 Architectural Nomenclature	Х						
GHPR 530 Introduction to Historic Preservation	Х						
GHPR 531 Preservation and Planning Law	Х						
GHPR 532 Intoduction to Curatorship				Х			
GHPR 533 Introduction to Historic Administration							Х
GHPR 538 Historic Preservation and Tourism	Х						
GHPR 539 American Decorative Arts							Х
GHPR 547 Problems in Architectural Interpretation		Х					
GHPR 551 Historic Building Systems	Х						
GHPR 552 Materials Conservation I	Х						
GHPR 557 Community Development and Downtown Revitalization	Х						
GHPR 558 Adaptive use of Historic Structures		Х					
GHPR 559 Urban Planning/Preservation Studio		Χ					

GHPR 572 Funding Preservation Projects		Х					
GHPR 620 Preservation Research Techniques	Х						
GHPR 630 Documenting and Recording Historical Places		Х					
GHPR 631 Preservation Administration and Planning		Χ					
GHPR 632 Interpreting the Historic House	Х						
GHPR 636 Historic Preservation Field Project			Х				
GHPR 638 Preserving Community Character							Χ
GHPR 651 Principles of Preservation Technology		Χ					
GHPR 652 Materials Conservation II		Χ					
URP 115 The American City	Х	Х					
URP 215 Introduction to Urban and Regional Planning	Х	Х					
URP 216 Readings in Urban Planning	Х						
URP 276 Principles of Geographic Information Systems	Х	Χ					
URP 306 Comprehensive Planning and Zoning		Χ					
URP 401 Planning/Preservation Graphics	Х						
URP 409 Professional Practice for Planners							Χ
URP 410L Site Planning Studio		Х					
URP 415W Methods of Planning Analysis	Х						
URP 435 History of Urban Form and Funcition		Х					
URP 452 Infrastructure Planning and Policy					Χ		
URP 459 Planning/Preservation Studio		Х					
URP 460 Transportation Modeling Systems							Χ
URP 495 Environmental Assessment and Planning	Х						
URP 505 Seminar In Methods and Research	Х						
URP 552 Infrastructure Planning and Policy					Х		
URP 553 Urban and Regional Planning	Х						
URP 555 Comprehensive Planning		Х					
URP 556 Zoning and Land Development Regulation		Х					
URP 557 Community Development and Downtown Revitalization	Х						
URP 559 Urban Planning/Preservation Studio		Х					
URP 560 Transportation Modeling Systems							Х
URP 580 Local Development Policy						Χ	

Geography and Geology Course Rotations 9.27.17

		Every Year	r	Even	Years	Odd]	
ESSC CLASSES	Fall	Winter	Summer	Fall	Winter	Fall	Winter	Irregular
ESSC 101 Weather and Forecasting	Х	Х						
ESSC 105 Climate Change in Human Times	Х	Х	Х					
ESSC 107 Introduction to Environmental Science	Х	Х						
ESSC 108 Earth Science for Non-Science Majors	Х	Х	Х					
ESSC 109 Earth Science lab for Non-Science Majors	Х	Х	Х					
ESSC 110 The Dynamic Earth System	Х	Х	Х					
ESSC 111 The Earth System Through Time	Х	Х						
ESSC 114 Geology of National Parks	Х		Х					
ESSC 120 Dinosaurs, Mammoths, and Trilobites					Х			
ESSC 202 Earth Science for Elementary Teachers	Х	Х	Х					
ESSC 208 Natural Environmental Hazards		Х						Х
ESSC 212 Weather, Climate, and the Earth System	Х	Х						
ESSC 227 Topographic Maps		Х						
ESSC 228 Mineralogy	Х							
ESSC 229 Rocks and Minerals		Х						
ESSC 300 Introduction to Hydrology		Х						
ESSC 303 Field Geography								Х
ESSC 307 Essentials of Oceanography for Elem. Teachers								Х
ESSC 311 Weather and Climate for Elementary Teachers	Х	Х						Х
ESSC 312 Essentials of the Geosphere for Elem. Teachers	Х							
ESSC 315 Water and the Environment of Elem. Teachers								Х
ESSC 320 Oceanography	Х	Х						
ESSC 324 Weather				Х				
ESSC 325 Geomorphology	Х							
ESSC 326 Structural Geology	Х							
ESSC 327 Soil Science								Х
ESSC 329 Igneous and Metamorphic Petrology					Х			
ESSC 330 Sedimentology and Stratigraphy							Х	
ESSC 331 Paleontology	Х							
ESSC 347 Methods for Teaching Secondary Earth Science		Х						
ESSC 370 Glacial and Quaternary Geology		Х						
ESSC 406 Nature of Science						Х		
ESSC 407 Nature of Science for Elementary Teachers				Х				
ESSC 422 Environmental Geochemistry							Х	
ESSC 424 The Global Climate System								Х
ESSC 425W Severe and Unusual Weather							Х	
ESSC 430 Petroleum Geology					Х			
ESSC 448 Hydrogeology		†				Х	†	
ESSC 450 Lake and Coastal Processes							 	Х
ESSC 460 Contaminant Hydrology		1			Х		 	-
ESSC 466W Global Tectonics	Х						 	
ESSC 470 Quantitative Methods in Geog. And Geol.							 	Х
ESSC 485 Introduction to Remote Sensing		Х					1	
ESSC 495 Environmental Assessment and Planning		 					1	

	Every Year			Even	Years	Odd]	
GEOG CLASSES	Fall	Winter	Summer	Fall	Winter	Fall	Winter	Irregular
GEOG 100: Intro Geospatial Sciences and Technology	Х	Х	Х					
GEOG 107 Intro to Geography	Х	Х	Х					
GEOG 110 World Regions	Х	Х	Х					
GEOG 111 Regions and Resources								Х
GEOG 112 Intro to Travel and Tourism	Х							
GEOG 115 Observing The Human Landscape								Х
GEOG 150 Thinking Sustainably	Х	Х	Х					
GEOG 212 Geography of Travel and Tourism		Х						
GEOG 276 Pricinples of Geographic Information Systems	Х	Х	Х					
GEOG 311 History and Geography of Modern Worlds	Х							
GEOG 313 Geography of Michigan	Х	Х	Х					
GEOG 314W Geography of Russia and Neighboring States	Х	Х						
GEOG 315 Travel and Tourism: European Scene		Х						
GEOG 318 Geography of Asia		Х						
GEOG 319 Geography of Europe	Х							
GEOG 320 Geography of US and Canada	Х	Х	Х					
GEOG 321 Geography of Latin America		Х						
GEOG 322 Geography of Africa	Х							
GEOG 332 Urban Geography	X							
GEOG 333 Unsettled Geographies	X	Х						
GEOG 335 Economic Geography	X							-
GEOG 336 Tourism and Socio-Economic Development								Х
GEOG 345 Geography of Resorts								X
GEOG 348 Teaching Social Studies for Elementary School	Х	Х						
GEOG 360 Cultural Geography		X						
GEOG 361 Geography of Population					Х			
GEOG 376 Spatial Analysis	Х							
GEOG 405 Aerial Photography Interpretation	X							-
GEOG 441 Transportation Geography and Planning	X							
GEOG 445 Cultural Tourism Resources	X							-
GEOG 446 Heritage Interpretation		Х						
GEOG 476 Geodatabases and GIS Client Applications	Х							-
GEOG 480 Geographic Information Systems Project					Х			
GEOG 484 GIS Customization andd Programming		Х						-
GEOG 505 Seminar in Methods and Research	Х							
GEOG 509 Geodatabases for Enterprise GIS	X							
GEOG 520 GIS Introduction for Educators								Х
GEOG 531 American Cultural Landscapes		Х	Х					
GEOG 541 Material Cultures Studies: Learning From Objects		X						-
GEOG 549 Cultural Landscape Interpretation	Х							
GEOG 571 Teaching of Social Studies	X	Х						
GEOG 571 Teaching of Social Studies GEOG 575 Interpretation of Aerial Photography	X							
GEOG 579 Geographic Information Systems	X	Х	Х					
GEOG 575 Geographic information systems GEOG 581 Advanced Environmental Assessment	X		^					
GEOG 581 Advanced Environmental Assessment GEOG 582 Remote Sensings of Earth Resources	^	Х						+
GEOG 582 Kernote Sensings of Earth Resources GEOG 583 Cartographic Design		X						+
GEOG 584 Visual Programming of GIS Customization		X						+
GEOG 584 Visual Programming of GIS Customization GEOG 585 Geographic Information Systems Applications	X							
GEOG 639 Continuous Enrollment	^	Х						+
GEOG 668 GIS Project		X						+
GEOG 670 Spatial Analysis and Modeling	X	^						
GEOG 678 Advanced Desktop Programming for GIS Customization	X				 			+
GEOG 683 Field Studies In Michigan	^							X

		Every Year	•	Even	Years	Odd Years			
GHPR CLASSES	Fall	Winter	Summer	Fall	Winter	Fall	Winter	Irregular	
GHPR 335 Historic Preservation	Х								
GHPR 401 Planning/Preservation Graphics	Х								
GHPR 475 Architectural Nomenclature	Х								
GHPR 530 Introduction to Historic Preservation	Х								
GHPR 531 Preservation and Planning Law	Х								
GHPR 532 Intoduction to Curatorship				Χ					
GHPR 533 Introduction to Historic Administration								Χ	
GHPR 538 Historic Preservation and Tourism	Х								
GHPR 539 American Decorative Arts								Χ	
GHPR 547 Problems in Architectural Interpretation		Х							
GHPR 551 Historic Building Systems	Х								
GHPR 552 Materials Conservation I	Х								
GHPR 557 Community Development and Downtown Revitalization	Х								
GHPR 558 Adaptive use of Historic Structures		Х							
GHPR 559 Urban Planning/Preservation Studio		Х							
GHPR 572 Funding Preservation Projects		Х							
GHPR 620 Preservation Research Techniques	Х								
GHPR 630 Documenting and Recording Historical Places		Х							
GHPR 631 Preservation Administration and Planning		Х							
GHPR 632 Interpreting the Historic House	X								
GHPR 636 Historic Preservation Field Project			Х						
GHPR 638 Preserving Community Character								Х	
GHPR 651 Principles of Preservation Technology		Х							
GHPR 652 Materials Conservation II		Х							

		Every Year	•	Even	Years	Odd]	
URP CLASSES	Fall	Winter	Summer	Fall	Winter	Fall	Winter	Irregular
URP 115 The American City	Х	X						
URP 215 Introduction to Urban and Regional Planning	Х	Х						
URP 216 Readings in Urban Planning	Х							
URP 276 Principles of Geographic Information Systems	Х	Х						
URP 306 Comprehensive Planning and Zoning		Х						
URP 401 Planning/Preservation Graphics	Х							
URP 409 Professional Practice for Planners								Х
URP 410L Site Planning Studio		Х						
URP 415W Methods of Planning Analysis	Х							
URP 435 History of Urban Form and Funcition		Χ						
URP 452 Infrastructure Planning and Policy						Χ		
URP 459 Planning/Preservation Studio		Χ						
URP 460 Transportation Modeling Systems								Х
URP 495 Environmental Assessment and Planning	Χ							
URP 505 Seminar In Methods and Research	Χ							
URP 552 Infrastructure Planning and Policy						Χ		
URP 553 Urban and Regional Planning	Х							
URP 555 Comprehensive Planning		X						
URP 556 Zoning and Land Development Regulation		X						
URP 557 Community Development and Downtown Revitalization	Х							
URP 559 Urban Planning/Preservation Studio		Х						
URP 560 Transportation Modeling Systems								Х
URP 580 Local Development Policy				•			Х	