GEOS 601 Polar Regions of the Earth: Science, Society, and Discovery  
Credits 3. 3 Lecture Hours.  
Disciplines and topics that define modern polar science in the north and south; includes history of the Polar Regions, polar geosciences, major polar scientific projects, and special topics; participate as individuals and teams in education, outreach and science projects.  
Prerequisite: Graduate classification.

GEOS 642/GEOG 642 Past Climates  
Credits 3. 3 Lecture Hours.  
Terrestrial and marine proxy records of past climate variability, including tree rings, coral, and sediments; past climate change events such as the Little Ice Age and Medieval Warm Period; greenhouse gases and global temperature; insight into the nature of climate change and challenges humankind faces in the next few centuries.  
Prerequisite: Graduate Classification.  
Cross Listing: GEOG 642/GEOS 642.

GEOS 677 Science, Technology, Engineering and Mathematics (STEM) Teaching Professional Development  
Credit 1. 1 Lecture Hour.  
Center for Teaching Excellence (CTE) consultation and faculty mentoring in STEM teaching; course topic and syllabus design; learning outcomes and assessment; teaching methodology; reflection on teaching philosophy; reflection on teaching as research. Must be taken on satisfactory/unsatisfactory basis.  
Prerequisites: Graduate classification and approval of instructor.  
Cross Listing: ENGR 677 and SCEN 677.

GEOS 689 Special Topics in...  
Credits 1 to 4. 1 to 4 Lecture Hours.  
Selected topics in an identified area of geosciences. May be repeated for credit.  
Prerequisites: Graduate classification and approval of instructor.