课程名（Coursename）  
Archaeological Science  
  
课程代码（Coursenumber）  
 5.24J  
  
课程对象（Audience）  
Undergraduate HASS Elective  
  
选课前提（prerequisite）  
Chemistry (GIR) or Physics I (GIR)  
  
单元（units）  
3-1-5  
  
添加至时间表 （add to schedule）  
Lecture: M EVE (7-10 PM) (4-370)  
  
开课教师（Teacher）  
H. N. Lechtman, J. Stubbe, F. A. Frey  
  
学期（Semester）  
spring term  
  
课程描述（Description）  
Pressing issues in archaeology as an anthropological science. Stresses the natural science and engineering methods archaeologists use to address these issues. Reconstructing time, space, and human ecologies provides one focus; materials technologies that transform natural materials to material culture provide another. Topics include 14C dating, ice core and palynological analysis, GIS and other remote sensing techniques for site location, soil micromorphology and site formation, sourcing of metal artifacts, and microstructural and mechanical analyses of cementitious materials used in ancient monumental buildings.  
  
课时信息（Totalhours）  
  
教参信息（Textbookinfo）  
1 Geoarchaeology: The Earth-Science Approach to Archaeological Interpretation, Second Edition by George (Rip) Rapp Jr. and Mr. Christopher L. Hill (Paperback - May 11, 2006)  
Other Editions: Hardcover, Paperback  
Publisher: Yale University Press; 2 edition (May 11, 2006)   
ISBN-13: 978-0300109665   
世界各地拥有馆藏的图书馆（OCLC）:259  
2 A Consumer's Guide to Archaeological Science (Manuals in Archaeological Method, Theory and Technique) by Mary E. Malainey (Hardcover - July 1, 2010)  
Publisher: Springer; 1st Edition. edition (July 1, 2010)   
ISBN-13: 978-1441957030   
世界各地拥有馆藏的图书馆（OCLC）:3  
3 Foucault's Strata and Fields: An Investigation into Archaeological and Genealogical Science Studies (Synthese Library) by Martin Kusch (Hardcover - Oct. 31, 1991)  
Publisher: Springer; 1 edition (October 31, 1991)   
ISBN-13: 978-0792314622   
4 Isotopes in Vitreous Materials (Studies in Archaeological Sciences 1) by Patrick Degryse, Julian Henderson, and Greg Hodgins (Hardcover - Aug. 15, 2009)  
Publisher: Leuven University Press (August 15, 2009)   
ISBN-13: 978-9058676900   
世界各地拥有馆藏的图书馆（OCLC）:61  
5 Bones, Rocks and Stars: The Science of When Things Happened by Chris Turney (Paperback - Dec. 26, 2007)  
Publisher: Palgrave Macmillan; Reprint edition (December 26, 2007)   
ISBN-13: 978-0230551947   
世界各地拥有馆藏的图书馆（OCLC）:90  
6 The Age of Everything: How Science Explores the Past by Matthew Hedman (Paperback - Sept. 15, 2008)  
Publisher: University Of Chicago Press (September 15, 2008)   
ISBN-13: 978-0226322933   
世界各地拥有馆藏的图书馆（OCLC）:509  
7 Archaeological Survey (Manuals in Archaeological Method, Theory and Technique) by E. B. Banning (Paperback - Sept. 1, 2002)  
Publisher: Springer; 1 edition (September 1, 2002)   
ISBN-13: 978-0306473487   
世界各地拥有馆藏的图书馆（OCLC）:329  
8 Interpreting Silent Artefacts: Petrographic Approaches to Archaeological Ceramics by Patrick Sean Quinn (Paperback - June 1, 2010)  
Publisher: Archaeopress (June 1, 2010)   
ISBN-13: 978-1905739295   
世界各地拥有馆藏的图书馆（OCLC）:5  
9 Practices in Archaeological Stratigraphy by Author Unknown (Hardcover - Apr. 27, 1993)  
Publisher: Academic Press (April 27, 1993)   
ISBN-13: 978-0123264459   
10 A Field Guide to Geophysics in Archaeology (Springer Praxis Books / Geophysical Sciences) by John Oswin (Hardcover - June 30, 2009)  
Publisher: Springer; 1 edition (June 30, 2009)   
ISBN-13: 978-3540766919   
世界各地拥有馆藏的图书馆（OCLC）:63