George Mason University  
Graduate Course Approval/Inventory Form

Please complete this form and attach a copy of the syllabus for new courses. Forward it as an email attachment to the Secretary of the Graduate Council. A printed copy of the form with signatures should be brought to the Graduate Council Meeting. Complete the Coordinator Form on page 2, if changes in this course will affect other units.

Please indicate:  ____ NEW  __ X__ MODIFY  ____ DELETE

Local Unit:  SCS  
Graduate Council Approval Date:  April 21, 2004

Course Abbreviation:  EOS  
Course Number:  900

Full Course Title:  Research Colloquium in Earth Systems and GeoInformation Sciences

Abbreviated Course Title (24 characters max.):  Colloquium in ESGS

Credit hours:  1  
Program of Record:  ESS M.S. and CSI Ph.D.

Repeatable for Credit?  __ D=Yes, not within same term  
__ X__ T=Yes, within the same term  
__ N=Cannot be repeated for credit

Up to hours

Activity Code (please indicate):  __ Lecture (LEC)  ____ Lab (LAB)  ____ Recitation (RCT)
___ Studio (STU)  ____ Internship (INT)  ____ Independent Study (IND)  __ X__ Seminar (SEM)

Catalog Credit Format  1: 1: 0  
Course Level:  GF(500-600)  ____ GA(700+)  __ X

Maximum Enrollment:  20  
For NEW courses, first term to be offered:  F05

Prerequisites or corequisites:  graduate standing.

Catalog Description (35 words or less):  Presentations in specific research areas of Earth Systems and Geoinformation Sciences by School of Computational Sciences faculty and staff members, GMU faculty in related programs, and professional visitors. May be repeated for credit; however, a maximum of three credits may be applied toward the Earth Systems and Geoinformation Sciences Ph.D.

For MODIFIED or DELETED courses as appropriate:

Last term offered:  
Previous Course Abbreviation:  
Previous number:  
Description of modification:

APPROVAL SIGNATURES:

Submitted by:  
email:  

Department/Program:  
Date:  

College Committee:  
Date:  

Graduate Council Representative:  
Date:  


**Approval from other units:**

Please list those units outside of your own who may be affected by this new, modified, or deleted course. Each of these units must approve this change prior to its being submitted to the Graduate Council for approval.

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Course proposal to the Graduate Council  
by  
The School of Computational Sciences

1. CATALOG DESCRIPTION

Research Colloquium in Earth Systems and GeoInformation Sciences

Prerequisites: graduate standing

Catalog description:
May be repeated. Presentations in specific research areas of Earth Systems and GeoInformation Sciences by ESGS/School of Computational Sciences faculty and staff members, GMU faculty in related programs, and professional visitors.

2. COURSE JUSTIFICATION

Course objectives: To expose students to the multi- and disciplinary research in the areas of ESGS, and facilitate the exchange of research ideas and information among researchers and students.

Course necessity: This is a course to support the new Ph.D. program in Earth Systems and GeoInformation Sciences. The new program has no such course in a colloquium format to provide an opportunity for students to aware of research directions and trends in the broad multi- and interdisciplinary area. Course must be taken three times e to fulfill colloquium requirement for the Ph.D. in ESGS.

Course relationship to Existing Programs: The course will be an elective course for CSI Ph.D. students in the Earth observing track. There are no significant overlaps between the proposed course and existing courses in EOS.

Course relationship to Other Existing Courses: There are many colloquium-type courses in the University, but this one focuses on Earth Systems and GeoInformation Sciences.

3. APPROVAL HISTORY: NA

4. SCHEDULING AND PROPOSED INSTRUCTORS:

Time of initial offering: Fall 05

Proposed instructors: Dr. Sheryl Beach
Course Syllabus:

SPRING 2005

EOS 900: ESGS Research Colloquium

Dr. Sheryl Beach, Colloquium Coordinator, 703-993-1213

Thursdays 4:30 - 5:45 p.m., JC 237 SCS Showcase

The ESGS Research Colloquium Series is sponsored by the program in Earth Systems and GeoInformation Sciences (SCS), the Center for Earth Observing and Space Research (CEOSR), the School of Public Policy (SPP), and the Departments of Geography and Environmental Science and Policy (in CAS).

This seminar series must be taken three times to satisfy one of the requirements in the PhD program in ESGS in the School of Computational Sciences. Students must attend 10 seminars per semester, to be selected from each semester’s schedule. Students may also learn about employment or intern opportunities from speakers in informal discussions before or after the presentations; the seminars are open to all. Seminars are canceled whenever classes at GMU are canceled for snow or other reasons. Announcements of cancellations are made in local media, as well as at 703-993-1000 and the GMU webpage.

SPRING 2005

EOS 900: ESGS Research Colloquium Schedule

Thursdays 4:30 - 5:45 p.m.

(SAMPLE SCHEDULE)

1/23 Short organizational session to determine enrollment & announce policies

1/30 Dr. Menas Kafatos, Dean of SCS: School of Computational Sciences Overview and Recent Developments in ESS

2/6 Dr. David Wong, GMU, Chair of ESGS/SCS: The Spatial Dimensions of West Nile Virus in the Eastern United States.

2/13 Dr. Kevin Pope, CEO of GeoEcoArc, & Research Faculty, ESGS/SCS: The Surface Expression of the Chixchulub Impact Crater.
2/20 Dr. Mike Summers, GMU/PHYS/ESGS/SCS **Flight Paths over Mars: New Airborne Platforms for Planetary Exploration**

2/27 Dr. Zafer Boybei: GMU/CAMP/SCS: **Modeling Atmospheric Dispersion Scenarios of Hazardous Blast Plumes in Tyson’s Corner VA.**

3/6 Dr. Sheryl Beach, GMU ESGS/SCS: **Spatial Sampling Strategies for Detecting a Volcanic Groundwater Plume.**

3/13 Spring break; NO MEETING

3/20 Dr. Dawn Parker, CSS/GEOG, GMU: **Modeling Dynamic Human-Land Interactions**

3/27 Dr. Richard Gomez, SCS: **A Hyperspectral Analysis of Chesapeake Bay Water Quality.**

4/3 Dr. Randy McBride, GMU/ESP: **Modeling Barrier Island Geomorphic change using GPS and Sediment Cores**

4/10 Dr. Ed Schneider, GMU SCS: **Developing Computational Models of Global Warming Scenarios**

4/17 Dr. Chao-Wei Yang, GMU SCS: **Distributed Geographic Information Computing**

4/24 Dr. Ruixin Yang: **GeoInformation Mining Systems**

5/1 Closing Ceremonies, Final discussion of Series.

NOTE: There is no final exam in this non-credit course.