

<b>OHIO STATE NEW COURSE REQUEST</b>
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College: Mathematical and Physical SciencesAcademic unit: School of Earth Sciences

Book 3 Listing:

(e.g., Portuguese)

Proposed

Course No: 885Full Title of Course: Research Principles and TechniquesProposed Effective Qtr/Yr: SU  AU  WI  SP  YEAR: 2007 (See OAA Academic Organization and Curriculum Handbook for Deadlines)**A. Course Offerings Bulletin Information.** Follow instructions in the OAA Academic Organization and Curriculum Handbook.

Is this a course with decimal subdivisions? If so, use one New Course Request form for the generic information that will apply to all subdivisions. Use separate forms for each new decimal subdivision, including on each form only the information that is unique to that subdivision.

18-Character Transcript Abbreviation: ResearchPrincTech Level U  G  P  Credit Hours: 2-9

Description (not to exceed 25 words):

This course offers the student graduate research experience under faculty supervisionQuarter offered (check): SU  AU  WI  SP  \*Distribution of class time/contact hours:Quarter and contact/class time hours information should be omitted from Book 3 publication: (check here) Prerequisite (s): Permission of InstructorExclusion or limiting clause: noneRepeatable to a maximum of 50 credit hours.Cross-listed with: noneGrade Option (Please check): Letter  S/U  Progress 

If this course is Progress graded, what course is the last one in the series?

Honors Statement: Yes  No   
Off-Campus: Yes  No GEC: Yes  No   
EM: Yes  No Admission Condition Course: Yes  No Other General Course Information: none

(e.g. "Taught in English." "Credit does not count toward BSBA degree.")

Subject Code \_\_\_\_\_ Subsidy Level (V, G, T, B, M, D, or P) \_\_\_\_\_

(If you have questions please email Jed Dickhaut @ dickhaut.1@osu.edu)

Will course be taught in distance learning format: Yes  No **B. General Information:**

1. Provide the rationale for proposing this course:

This course is needed to allow students to obtain credit for project research not related to any particular program course. The research is more than independent study as it usually closely interfaces with faculty research interests.

2. List Major/Minor affected by the creation of this new course. Attach revisions of all affected programs.

This course is (check one) Required  Elective  Other (Explain) 

\* If the course offered is less than quarter, term, or semester, please also complete the Flexibly Scheduled/Off Campus/Workshop Request form.

3. Indicate the nature of the program adjustments, new funding, and/or withdrawals that make possible the implementation of this new course.

\_\_\_\_\_  
 No program adjustments, new funding, nor withdrawals are needed to implement this new course.

4. Is the approval of this request contingent upon the approval of other course requests or curricular requests?

Yes  No  List: \_\_\_\_\_

5. If this course is part of a sequence, list the number of the other course(s) in the sequence: \_\_\_\_\_

6. Expected section size: \_\_\_\_\_ Proposed number of sections per year: \_\_\_\_\_

7. Do you want prerequisites enforced electronically? (See OAA Curriculum Manual for what can be enforced.) Yes

8. This course has been discussed with and has the concurrence of the following academic units needing this course or with academic units having directly related interests (List units and attach letters and/or forms): Not Applicable

9. Attach a course syllabus that includes a topical outline of the course, student learning outcomes and/or course objectives, off-campus field experience, methods of evaluation, and other items as stated in the OAA Curriculum Handbook.

There is no syllabus for this course since the student activities, outcomes, and objectives are arranged individually with the supervising faculty.

**APPROVAL SIGNATURES** (As needed. All signatures on lines in ALL CAPS ( e.g. ACADEMIC UNIT) must be completed

ANNE E. CAREY ANNE E. CAREY 7 DEC 2006  
 Academic Unit Undergraduate Studies Committee Chair (Undergraduate course) Printed Name Date

MOTOMU IBAZAKI Motomu Ibaazaki 9/18/2006  
 Academic Unit Graduate Studies Committee Chair (Undergraduate/Graduate course) Printed Name Date

ANNE E. CAREY ANNE E. CAREY 7 DEC 2006  
 School/College Undergrad Curriculum Committee (Undergraduate/Graduate course) Printed Name Date

FRANK W. SCHWARTZ Frank W. Schwartz 12/8/06  
 School/College Graduate Curriculum Committee (Undergraduate/Graduate course) Printed Name Date  
 ACADEMIC UNIT CHAIR /SCHOOL DIRECTOR Printed Name Date

COLLEGE DEAN Printed Name Date

Graduate School (If Appropriate) Printed Name Date

ASC Curriculum Committee Chair (If Appropriate) Printed Name Date

University Honors Center (If Appropriate) Printed Name Date

Office of International Education (study tour only) Printed Name Date

ACADEMIC AFFAIRS Printed Name Date

## **Syllabus: GeolSci885 - Research Principles and Techniques**

Outline of course: The course offers three distinct components of conducting scientific research. The student will be exposed to these components through individual or team efforts and with in-house study or field experience by solving and investigating topical problems related to the state of the art in the Earth Sciences. The three research components are: 1) Searching internet data bases and libraries as well as on-campus library holdings to form a scientific foundation of the study area. 2) Developing solutions and a theoretical background in order to advance the knowledge base in the field of interest. 3) Performing experiments using instrumental data or computational methods founded on theoretical models in order to arrive at and support factual conclusions.

Student learning outcomes and course objectives: The student will be able to conduct research at the graduate level and will have gained expertise in acquiring and honing a deep understanding of a current topic of interest in the field of Earth Sciences.

Method of evaluation: Each student is expected to generate periodic progress reports and interim technical expositions during the course of study. Appraisals of these documents and of student-instructor consultations form the basis for a satisfactory/unsatisfactory evaluation of the student.