GEOGRAPHY 503: Fundamentals of Geoenvironmental Research
Dr. Christopher Woltemade
Fall 2007

OFFICE: 108 Shearer Hall • Phone: 477-1143 • E-mail: cjwolt@ship.edu

OFFICE HOURS:
Tuesday 8:30 – 9:30 AM
Wednesday 1:00 – 4:00 PM
Thursday 8:30 – 9:30 AM (or by appointment)

GOALS: Fundamentals of Geoenvironmental Research will build student skills common to developing, implementing, and disseminating research projects in the major sub-disciplines of geoenvironmental studies. The course will generate opportunities to develop critical reading, writing, and presentation skills. Students will develop a literature review and a research proposal, as would be appropriate for either an independent research project or a masters thesis. The course will also develop fundamental skills for preparing grant proposals, professional reports, and oral and graphic presentations.


WEB PAGE: webspace.ship.edu/cjwolt/fun

ATTENDANCE: Attendance and participation in class are required. If you miss class, you are responsible for learning (from other students or myself) missed material and/or assignments. Students with more than one (unexcused) absence may fail the course, regardless of their performance. Disturbance of class will not be tolerated.

GRADING: Grades will be based on 300 possible points.
270 - 300 (A), 240 - 269 (B), 210 - 239 (C), < 210 (F)

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<th>Points</th>
<th>Item</th>
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<tbody>
<tr>
<td>10</td>
<td>Statement of interests memo</td>
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<td>60</td>
<td>Written literature review</td>
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<td>25</td>
<td>Oral presentation of literature review</td>
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<td>25</td>
<td>Presentation of data in tables and graphs</td>
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<td>100</td>
<td>Research proposal</td>
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<td>20</td>
<td>Research grant proposal</td>
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<td>10</td>
<td>Draft research proposal poster</td>
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<td>25</td>
<td>Poster presentation of research proposal</td>
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<td>25</td>
<td>Class participation</td>
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CLASS PARTICIPATION: You are expected to come to each class prepared to participate. Students who consistently provide thoughtful comments on assigned readings, presentations, and lecture material will earn 25 points for class participation. Students who are usually well prepared and participate in classroom discussion on a limited basis will earn 15 points for class participation. Students who rarely participate in discussion and/or are not consistently present and prepared for discussion will earn 0 points for class participation.

READINGS: In order to maximize the quality of discussion, for each reading you are required to email to me at least two (2) discussion points and two (2) discussion questions no later than 8:00 AM on the date of the discussion. Your discussion points and questions may focus on content, literature review, methods, graphic presentation of information, critique of the article, or other issues.


NOTE: I am willing to make any reasonable accommodations for students with limitations due to disability, including learning disability. Please see me during the first week of class to discuss any special needs you have. Also, any expected religious holiday absences must be provided to me in writing by September 4.
COURSE OUTLINE

AUG 28  Course introduction
Introduction to geoenvironmental research fields and department faculty
Bibliographic searches and types of source documents
Text: Chapter 1

SEP 4  Preparing a professional memo
Preparing an abstract
Preparing a literature review
Text: Chapter 2
Discussion: Research proposal example #1
Discussion: Article #1 (Manners et al. 2007)

SEP 11  Proper citation of sources
Proofreading and editing
Fundamentals of oral presentation
Due: Statement of interests memo
Due: Topic statement for literature review
Discussion: Research proposal example #2
Discussion: Article #2 (Vowles 2006)

SEP 18  Preparing a research proposal
• Format / organization
• Narrowing the focus
• Research questions and hypotheses
• Types and sources of data (e.g. primary, secondary, etc.)
• Methods
Text: Chapters 3, 4, 5
Discussion: Research proposal example #3

SEP 25  Graphical and tabular presentation of data
Example exercises in data graphing
Discussion: Article #3 (Birkeland et al. 1991)

OCT 2  Graphical and tabular presentation of data
Due: Presentation of data in tables and graphs
Text: Chapters 10, 11, 14
Discussion: Student graphics

OCT 9  FALL BREAK
COURSE OUTLINE (continued)

OCT 16  Student oral presentations of literature reviews
        *Due: Literature review*

OCT 23  Student oral presentations of literature reviews

OCT 30  Preparation of professional articles
        Cartographic presentation of data
        *Discussion: Article #4 (O’Kelly 2007)*
        *Discussion: Article #5 (Mennis and Jordan 2005)*
        *Text: Chapter 7*

NOV 6   Preparing grant proposals
        • Targeting the RFP, Budget, Timeline, Qualifications, Assessment, Dissemination
        *Discussion: Article #6 (Goetz et al. 2004)*
        *Text: Chapter 6*

NOV 13  Research proposal workday

NOV 20  Professional reports (Scope of work, milestones, deliverables, etc.)
        *Due: Research proposal*
        *Due: Grant proposal*

NOV 27  Peer review of research proposal posters
        *Due: Draft poster of research proposal*

DEC 4   Student presentations of research proposal posters
        *Due: Final poster of research proposal*
Additional resources available in Ezra Lehman Library:


