

**Department of Civil Environmental and Geomatics Engineering
Florida Atlantic University
Course Syllabus**

1. Course title/number, number of credit hours	
Geomatics Engineering Design 1	3 credit hours
2. Course prerequisites, corequisites, and where the course fits in the program of study	
Corequisite: SUR 4531 and SUR 4531L	
3. Course logistics	
<p><i>Term:</i> Fall 2013 This is a live on line course <i>Class location and time:</i> T 7:00 -10:00 PM Lecture Live On Line Team Meeting, every 4th class - Jupiter Campus room AD 222</p>	
4. Instructor contact information	
<i>Instructor's name</i> <i>Office address</i> <i>Office Hours</i> <i>Contact telephone number</i> <i>Email address</i>	Donald J. Leone, Ph.D., PE Interim Director and Visiting Professor of Geomatics Engineering Boca Raton, Building 36, Room 203 Office Hours: M 7-8 PM On Line (651) 297-3104 dleone@fau.edu
5. TA contact information	
<i>TA's name</i> <i>Office address</i> <i>Office Hours</i> <i>Contact telephone number</i> <i>Email address</i>	N/A
6. Course description	
Design teams are formed and projects selected for the senior capstone design project. Projects are developed with the advice and approval of practitioners and faculty. Proposals are completed and accepted by the faculty and local practitioners. Design and professional practice issues are presented and discussed.	
7. Course objectives/student learning outcomes/program outcomes	
<i>Course objectives</i>	A. Understand the design process by working on a real world project B. Be by a guided by a professional mentor in all aspects of the project. C. Learn to work together as a team to accomplish the objectives of a devised plan. D. Understand the importance of the ability to communicate technical findings and results both orally and in written form.
<i>Student learning outcomes & relationship to ABET a-k objectives</i>	1. Be aware of what it means to be an effective team member. (d,f,h,i,j,k) 2. Understand project planning. (b,c,k) 3. Comprehend how to collect data needed for the project. (a,b,c,e,h,k) 4. Understand and execute the preparation of a proposal. (b,c,e,g,h,i,j,k,) 5. Interact professionally with the project's practitioner

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	(professional mentor). (a,b,c,d,e,f,g,h,i,j,k) 6. Understand the preparation and delivery of a technical oral report.(a,b,d,g,k)	
<i>Relationship to program outcomes</i>	Outcome 1: An understanding of professional and ethical responsibility.	High
	Outcome 2: A working knowledge of fundamentals, engineering tools, and experimental methodologies.	High
	Outcome 3: An understanding of the social, economic, and political contexts in which engineers must function.	High
	Outcome 4: An ability to plan and execute an engineering design to meet an identified need.	High
	Outcome 5: An ability to function on multi-disciplinary teams.	High
	Outcome 6: An ability to communicate effectively.	High
	Outcome 7: Be proficient in the following geomatics engineering disciplines: plane, construction and engineering surveying, remote sensing, photogrammetry, geographic information systems, automated surveying systems, and legal and business practices.	High
	Outcome 8: Have an appreciation for the role of geomatics engineering in infrastructure and environmental planning.	High
	Outcome 9: Achieve success in finding professional employment and/or pursuing further academic studies.	High
8. Course evaluation method		
1. Proposal	25%	<i>Note:</i> The minimum grade required to pass the course is C.
2. Progress Reports	15%	
3. Written Report	35%	
4. Oral Report	20%	
9. Course grading scale		
There is not any fix criteria for the grading scale. The overall performance as related to course objectives and outcomes is evaluated and considered during grading.		
10. Policy on makeup tests, late work, and incompletes		
<i>Makeup Assignments</i> are given only if there is solid evidence of a medical or otherwise serious emergency that prevented the student of participating in the exam. Makeup exam should be administered and proctored by department personnel unless there are other pre-approved arrangements. <i>Late work</i> is graded down <i>Incomplete grades</i> are against the policy of the department. Unless there is solid evidence of medical or otherwise serious emergency situation incomplete grades will not be given.		
11. Special course requirements		
Computer, Internet Connection		
12. Classroom etiquette policy		
Proper communication during the live on line lectures using audio or chat, is to be conducted in a manner that will enhance and maintain a productive atmosphere for education.		
13. Disability policy statement		

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In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) located in Boca Raton campus, SU 133 (561) 297-3880 and follow all OSD procedures.

14. Honor code policy

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and place high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. See University Regulation 4.001 at www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf

15. Required texts/reading

Text: "Geomatics engineering – A practical Guide to Project Design", by Clement A. Ogaja, 2011, CRC Press, ISBN 978-1-4398-1743-8

16. Supplementary/recommended readings

1. None

17. Course topical outline, including dates for exams/quizzes, papers, completion of reading

Week	Topic
1	Introduction and Organization, Review of Candidate Projects
2	Projects /Teams Selection/ Communications Software/ Proposal Writing
3	Planning Software / Team Dynamics /Proposal Writing/Progress Reports
4	Progress Report 1
5	Proposal Due / Progress Report 2
6-11	Progress Report 3,4,5,6,7.,8
12	Written Status Report Format
13	Oral Presentations / Draft of Written Status Report Due
14	Practice Oral Presentation
15	Oral Presentation