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See <http://www.uaf.edu/uafgov/faculty> for a complete description of the rules governing...

SUBMITTED BY:

Department	Geology and Geophysics	College/School	CNSM
Prepared by	Jeff Freymueller	Phone	X7286
Email Contact	Jeff.freymueller@gi.alaska.edu	Faculty Contact	

1. ACTION DESIRED (CHECK ONE):

Trial Course	<input type="checkbox"/>	New Course	<input checked="" type="checkbox"/>
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COURSE IDENTIFICATION

GEOS 636 Beyond the Mouse: Computer Programming and Automation for Geoscientists

Basic concepts of computer programming and effective automation of tasks using a computer, with an emphasis on tools and problems common to the geosciences and other physical sciences. Use of MATLAB, shell scripting and various command line tools for data analysis, making scientific figures, maps and visualizations.

11. COURSE CLASSIFICATIONS: (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual. If justification is needed, attach on separate sheet.)

H = Humanities

S = Social Sciences

Will this course be used to fulfill a requirement for the baccalaureate core?

YES

NO

IF YES check which core requirements it could be used to fulfill.

12. COURSE REPEATABILITY:

Is this course repeatable for credit? YES

NO

Justification: Indicate why the course can be repeated

No

Yes

Library resources are not required for the course.

*What programs/departments will be affected by this proposed action?
Include information on the Programs/Departments contacted (e.g., email, memo)*

The first course has had 2 students from the Department of...

[Redacted]

APPROVALS:

Samuel Howell

Date

9/26/11

[Signature]

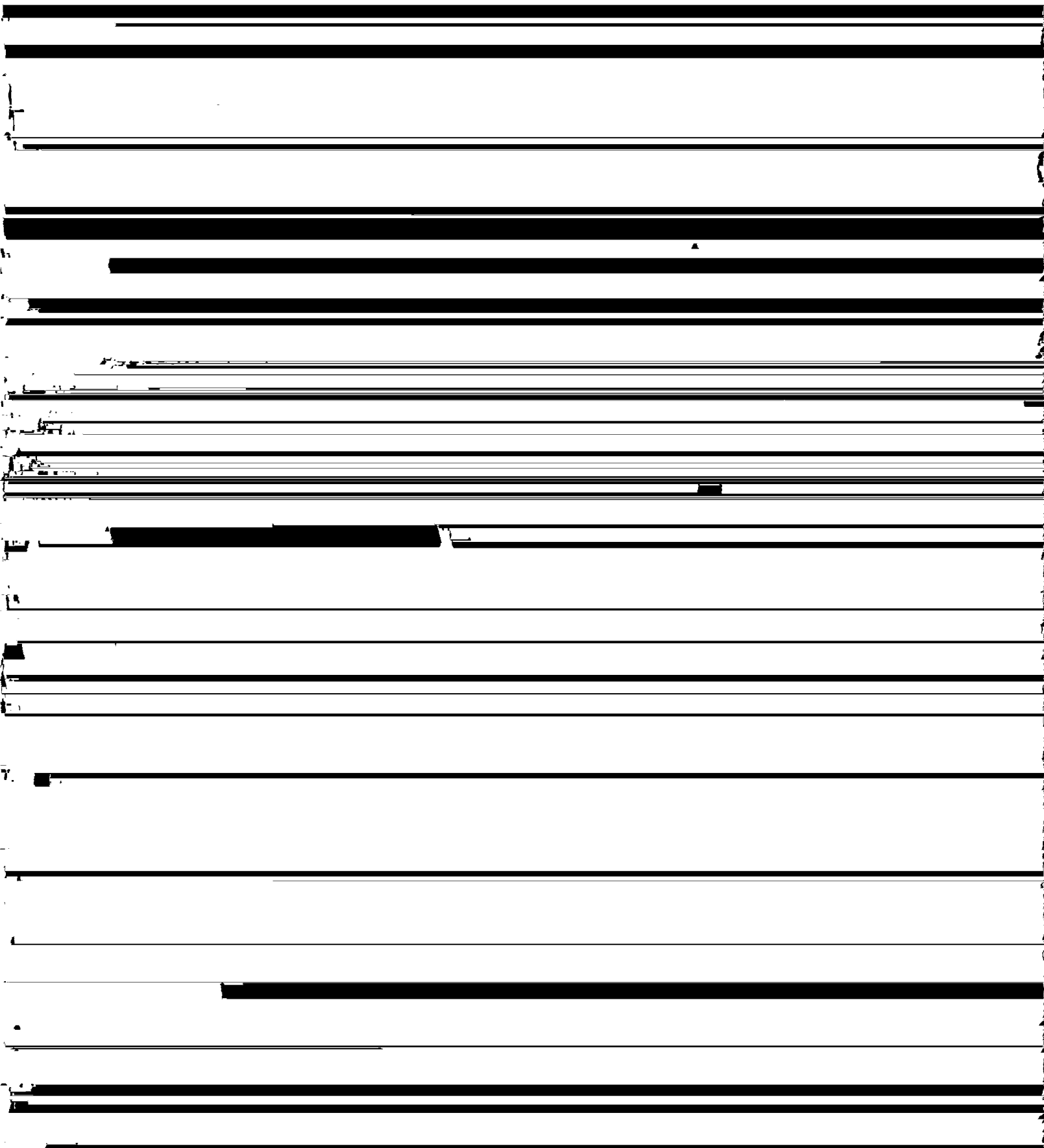
Date

10/6/11

Signature Chair College/School Curriculum Council for [Redacted]

Sample Syllabus for GEOS 436/636

The remainder of this file is the actual syllabus for the current trial version of the course, which is



[The remainder of the page is heavily redacted with thick black horizontal bars, obscuring all text and graphics.]

Grading:

This 3 credit class is pass/fail. Passing is based on meeting all of the following criteria:

Criteria	Passing	Failing
1. Attendance	80%	Less than 80%
2. Class Participation	80%	Less than 80%
3. Written Assignments	80%	Less than 80%
4. Final Exam	80%	Less than 80%
5. Final Project	80%	Less than 80%
6. Final Paper	80%	Less than 80%
7. Final Presentation	80%	Less than 80%
8. Final Report	80%	Less than 80%
9. Final Thesis	80%	Less than 80%
10. Final Dissertation	80%	Less than 80%
11. Final Dissertation Defense	80%	Less than 80%
12. Final Dissertation Approval	80%	Less than 80%
13. Final Dissertation Submission	80%	Less than 80%
14. Final Dissertation Archiving	80%	Less than 80%
15. Final Dissertation Availability	80%	Less than 80%
16. Final Dissertation Access	80%	Less than 80%
17. Final Dissertation Citation	80%	Less than 80%
18. Final Dissertation Indexing	80%	Less than 80%
19. Final Dissertation Metadata	80%	Less than 80%
20. Final Dissertation Searchability	80%	Less than 80%
21. Final Dissertation Discoverability	80%	Less than 80%
22. Final Dissertation Usability	80%	Less than 80%
23. Final Dissertation Interoperability	80%	Less than 80%
24. Final Dissertation Portability	80%	Less than 80%
25. Final Dissertation Reusability	80%	Less than 80%
26. Final Dissertation Sustainability	80%	Less than 80%
27. Final Dissertation Longevity	80%	Less than 80%
28. Final Dissertation Resilience	80%	Less than 80%
29. Final Dissertation Flexibility	80%	Less than 80%
30. Final Dissertation Scalability	80%	Less than 80%
31. Final Dissertation Reliability	80%	Less than 80%
32. Final Dissertation Security	80%	Less than 80%
33. Final Dissertation Privacy	80%	Less than 80%
34. Final Dissertation Integrity	80%	Less than 80%
35. Final Dissertation Authenticity	80%	Less than 80%
36. Final Dissertation Accountability	80%	Less than 80%
37. Final Dissertation Transparency	80%	Less than 80%
38. Final Dissertation Openness	80%	Less than 80%
39. Final Dissertation Inclusivity	80%	Less than 80%
40. Final Dissertation Diversity	80%	Less than 80%
41. Final Dissertation Equity	80%	Less than 80%
42. Final Dissertation Justice	80%	Less than 80%
43. Final Dissertation Fairness	80%	Less than 80%
44. Final Dissertation Reasonableness	80%	Less than 80%
45. Final Dissertation Proportionality	80%	Less than 80%
46. Final Dissertation Balance	80%	Less than 80%
47. Final Dissertation Harmony	80%	Less than 80%
48. Final Dissertation Unity	80%	Less than 80%
49. Final Dissertation Coherence	80%	Less than 80%
50. Final Dissertation Consistency	80%	Less than 80%
51. Final Dissertation Continuity	80%	Less than 80%
52. Final Dissertation Stability	80%	Less than 80%
53. Final Dissertation Endurance	80%	Less than 80%
54. Final Dissertation Persistence	80%	Less than 80%
55. Final Dissertation Perseverance	80%	Less than 80%
56. Final Dissertation Determination	80%	Less than 80%
57. Final Dissertation Resolve	80%	Less than 80%
58. Final Dissertation Willpower	80%	Less than 80%
59. Final Dissertation Fortitude	80%	Less than 80%
60. Final Dissertation Courage	80%	Less than 80%
61. Final Dissertation Bravery	80%	Less than 80%
62. Final Dissertation Valor	80%	Less than 80%
63. Final Dissertation Heroism	80%	Less than 80%
64. Final Dissertation Gallantry	80%	Less than 80%
65. Final Dissertation Nobility	80%	Less than 80%
66. Final Dissertation Honor	80%	Less than 80%
67. Final Dissertation Integrity	80%	Less than 80%
68. Final Dissertation Honesty	80%	Less than 80%
69. Final Dissertation Truthfulness	80%	Less than 80%
70. Final Dissertation Sincerity	80%	Less than 80%
71. Final Dissertation Candor	80%	Less than 80%
72. Final Dissertation Openness	80%	Less than 80%
73. Final Dissertation Transparency	80%	Less than 80%
74. Final Dissertation Accountability	80%	Less than 80%
75. Final Dissertation Responsibility	80%	Less than 80%
76. Final Dissertation Obligation	80%	Less than 80%
77. Final Dissertation Duty	80%	Less than 80%
78. Final Dissertation Commitment	80%	Less than 80%
79. Final Dissertation Devotion	80%	Less than 80%
80. Final Dissertation Dedication	80%	Less than 80%
81. Final Dissertation Fidelity	80%	Less than 80%
82. Final Dissertation Loyalty	80%	Less than 80%
83. Final Dissertation Faithfulness	80%	Less than 80%
84. Final Dissertation Reliability	80%	Less than 80%
85. Final Dissertation Dependability	80%	Less than 80%
86. Final Dissertation Trustworthiness	80%	Less than 80%
87. Final Dissertation Credibility	80%	Less than 80%
88. Final Dissertation Reputability	80%	Less than 80%
89. Final Dissertation Respectability	80%	Less than 80%
90. Final Dissertation Dignity	80%	Less than 80%
91. Final Dissertation Honorability	80%	Less than 80%
92. Final Dissertation Nobility	80%	Less than 80%
93. Final Dissertation Royalty	80%	Less than 80%
94. Final Dissertation Aristocracy	80%	Less than 80%
95. Final Dissertation Gentry	80%	Less than 80%
96. Final Dissertation Nobility	80%	Less than 80%
97. Final Dissertation Nobility	80%	Less than 80%
98. Final Dissertation Nobility	80%	Less than 80%
99. Final Dissertation Nobility	80%	Less than 80%
100. Final Dissertation Nobility	80%	Less than 80%

	Lab 2: Matlab and Variables	
Sep 26,27	Lecture 3: Matlab I: (Advanced) Variables and functions	Jeff Freymueller
	Lab 3: Matlab structs and functions	
Oct 03,04	Lecture 4: Fundamental Programming Principles II: Control Structures	Ronni Grapenthin
	Lab 4: Matlab flow control	
Oct 10,11	Lecture 5: Matlab I/O I	Ronni Grapenthin
	Lab 5: Matlab I/O I (files)	
Oct 17,18	Lecture 6: Matlab I/O II	Ronni Grapenthin
	Lab 6: Matlab I/O II (plotting)	
Oct 24,25	Lecture 7: Unix Tools I	Jeff Freymueller
	Lab 7: Unix Tools	
Oct 31, Nov 01	Lecture 8: Unix Tools II	Jeff Freymueller
	Lab 8: Unix Tools	

	Lab 9: Unix Tools	
Nov 14,15	Lecture 10: Debugging	Ronni Grapenthin
	Lab 10: Debugging	
Nov 21,22	Lecture 11: GMT I	Bernie Coakley
	Lab 11: GMT – Data mapping	
Nov 28,29	Lecture 12: GMT II	Bernie Coakley
	Lab 12: GMT – Data mapping	
Dec 5-12	Independent Study: HTML	Ronni Grapenthin
	Lab 13: Setting up a website for project	

required). Once virtualbox is installed you need to put a linux distribution of your choice (maybe ubuntu) on top of this. See Ronni (ronni <at> gi <dot> alaska <dot> edu) if you need help with that.