Announcements:

Expected background:

- Students are expected to know enough about signals and systems, and Matlab, to be able to follow the lectures and do homeworks quite easily.
- Those who are considering this course, please look at the textbook to see if the material appears accessible to you.

- Prerequisite for this course is ECE 528 (or permission of the instructor).
- ECE 535 is not a required prerequisite, but if you have already completed it with a good grade, this course will be easier for you.
- You can also take ECE 535 and ECE 635 concurrently.
- We will be using matrices, z-transforms, correlation functions and power spectral densities.
- We will use some properties of simple optimization algorithms,
- There will be several Matlab assignments.
- Students will do individual projects on one of the new methods of adaptive signal processing published in recent literature.
- If by any chance you have your own project that is related to your work, and if the project fits in this course, you may do some work on such a project for class credit.
- An interesting project in this class may get you started towards an ECE Scholarly Paper required for graduation with an MS EE degree.
- If you wish to discuss this further with me, please send me an email to amanitiu at gmu.edu

Office Hours
2:00 to 3:00 pm on Thursdays
Main Textbook

Other recommended materials

- *The Student Edition of MATLAB*, current version

Homework Excercises and Project

HW will be assigned periodically and are due the following week **at the beginning of class**.
In the second part of the course students will develop individual projects to be presented 2 weeks before the end of the semester.
Typically, a project may be a computational investigation of selected adaptive algorithms published in recent technical literature. Students should start planning such a project early in the semester, by studying papers on adaptive signal processing and proposing the project before the Spring Break.

Two Tests
will be given (in class) during the semester. These are normally closed-book tests, so you need to make sure you remember the basic algorithms and formulas before the test.

Quizzes
will be given during lectures. Typically those will be short quizzes to test your retention of previous material (diagrams, equations).
They will be announced the week before. Two quizzes will be given during the semester, each worth 5%.

Final Grades
are determined by a weighted average of the homework, the two tests, quizzes, and the final in the following manner:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
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<tbody>
<tr>
<td><strong>Homework</strong></td>
<td>10%</td>
</tr>
<tr>
<td><strong>Test 1</strong></td>
<td>20%</td>
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<tr>
<td><strong>Test 2</strong></td>
<td>20%</td>
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<tr>
<td><strong>Quizzes (2), 5% each</strong></td>
<td>10%</td>
</tr>
<tr>
<td><strong>Project</strong></td>
<td>10%</td>
</tr>
<tr>
<td><strong>Final Exam</strong></td>
<td>30%</td>
</tr>
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Grade scale (approximate, subject to small adjustments at the end of the course depending on difficulty of tests):

60% - 76.9%        C
77% - 79.9%        B-
80% - 86.9%        B
87% - 89.9%        B+
90% - 92.9%        A-
93% - 96.9%        A
97% - 100%         A+

It is also possible to get an F (for scores below 60%), if the performance is very weak or if the student stops attending without withdrawing.