COURSE OUTLINE FOR ESE 124 FALL 2017

INSTRUCTOR:

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RECOMMENDED (BUT NOT REQUIRED) TEXT FOR SUPPLEMENTAL READING:

Stephen Kochan, *Programming in C (3rd Edition),* SAMS Developer's Library. This book may be downloaded as a *free* pdf file from the internet.

- 1 Background information. Becoming familiar with using the Microsoft Visual C++ Express Edition. Designing and running simple programs
- 2 Variables, data types and arithmetic expressions
- 3. Looping. The *for, while, do while, break* and *continue* statements. Nested loops
- 4. Making decisions. The *if* statement, the *if else* construct, the *switch* statement
- 5. Working with prototype functions. Method of call by value
- 6. Working with arrays and matrices
- 7. Character strings
- 8. Pointers. Method of call by reference
- 9. Datafiles, exporting datafile to Microsoft Excel for graphing