# Topics for Midterm F2014:

1. Architecture - define uses, activities, partitions, events, interactions, views, critical issues
2. Software structure – client/server, components, program tasks
3. .Net Threads and Tasks – expect to write a code fragment that has to create one or more threads
4. Synchronization
5. Queues – when and why to use
6. C# object model
7. Simple reflection
8. Lambdas, delegates and .Net event model
9. When, why do we need Dispatcher.Invoke?
10. XML – what is it?  What is it used for?
11. LINQ for collections and XML – expect to write code
12. Files – how to read/write (may need this to write a bit of code)
13. WCF – Contracts, Endpoints, Activation models
14. WPF – Panels, Controls, event routing
15. Expect to write code fragments similar to the code used in projects

Text material to review:

1. Types and Exceptions           Chapters 2-3
2. Delegates                              Chapter 4
3. .Net Framework Class Library   Chapters 5-7
4. XML                                     Chapter 8-11
5. Reflection                            Chapter 19
6. Multithreading                     Chapter 14, 22
7. WCF                                    Class notes and code examples
8. WPF                                    Class notes and code examples
9. Diagrams for processes, virtual memory, and windows events
10. Notes on UML diagrams
11. C# syntax and semantics that we have emphasized in class


1. Project #5 architecture
2. Project #4 design
3. Project #2 design