Course Objectives:

The purpose of this course is to acquaint the student with fundamentals of instrumental methods for chemical analysis and problem solving.

Safety: Rules and Guidelines for safety are to be followed at all times. You will read and sign the lab safety sheet prior to starting any lab work. Goggles must be worn at all times during the lab. You should know the location of safety equipment in lab.

Grading:

Reports and lab notebook are due at the \textit{beginning of the lab} on the appropriate date. Otherwise it will be considered late. Lab reports will not be handed back until end of semester.

\begin{tabular}{ll}
Lab Reports (12) & 1200 pts \\
Practice Problems & 25 pts \\
Lab Notebook & 100 pts \\
Lab Technique & 175 pts \\
\textbf{Total} & \textbf{1500 pts}
\end{tabular}

Lab Reports:

Pre-labs are due by email at 11:59pm the day before the lab and are worth 5 pts. You will not be allowed to start the lab without a complete pre-lab. Typed reports are due one week after completion of the respective lab and are worth 95 pts. Late lab reports will not be accepted without a reasonable excuse (10 pts. lost per day late, after one week reports will not be accepted). More detailed description of lab report requirements can be found in the lab manual. Reports will be graded based on the following: formatting, flow of report, understanding of technique(s), analysis of results, and results.

Lab Notebook:

You must have a bound notebook with sequentially numbered pages. Entries should be legible and easy to follow. Use permanent ink ONLY and mistakes should be crossed out with a \textit{single line ONLY}. Entries also need to be dated and every lab should be signed when completed. More detailed description of lab notebook requirements can be found in the lab manual.

Lab Technique:

You will be graded on the following: cleanliness (glassware and lab area), waste manifest, attendance and tardiness, check-in cards (breakage), and instrument use and laboratory efficiency (be prepared for class!)

Internet Resources:

\url{http://teaching.shu.ac.uk/hwb/chemistry/tutorials/}