



**Preparation for the Laboratory:** Success in the laboratory will depend upon your understanding of the experimental procedures and your efficient use of time. You should read the indicated pages, become familiar with the laboratory instructions, and understand what you are to do. Note carefully any safety precautions. Be sure to include in your notebook any hazards associated with the materials you will be using. You will **not** be allowed to have your textbook in the laboratory. You should write up the experimental procedure in your notebook prior to coming to the laboratory.

### Schedule of Experiments

Lab Period	Date	Expt. #	Title and (Reading)*, **, *** Handouts will be posted on Blackboard a minimum of one week prior to the experiment after Lab Period 1
1	Jan. 16, 17	<b>1</b> -- -- --	Introduction to the Laboratory, Laboratory Notebook (see handout), and Laboratory Safety (see handout) The Metric System (**Manual pp 1– 3) Physical Evidence Collection: Mass, Weight and Units (**J pp 30-38) Processing the Crime Scene (*S pp 36 - 67) <a href="http://www.fbi.gov/hq/lab/fsc/backissu/april2000/twgcsi.pdf">http://www.fbi.gov/hq/lab/fsc/backissu/april2000/twgcsi.pdf</a>
2	Jan. 22, 23	-- <b>2C</b>	Accuracy and Precision (see handout) Practice in Making Laboratory Measurements (Part C): Densities of Irregularly Shaped Solids (Manual pp 8 – 9)
3	Jan. 29, 30	<b>6B, C &amp; D</b> --	Density of Glass (Fragments) by Flotation and Density Gradient Columns (Manual pp 39 – 42) Soil Analysis (see handout)
4	Feb. 5, 6	<b>7C</b> <b>34A, B, C</b>	Rate of Settling of Soil Particles (Manual pp 56 – 57, see handout) The Emission Spectrum of Elements (Manual 293 – 298)
5	Feb. 12, 13	-- -- <b>4A</b>	The Refractive Index of Glass (Fragments) by Immersion The Microscope (S pp 169 – 184) Practice in the Use of the Microscope (Manual 19 – 20, see handout)
6	Feb. 19, 20	<b>14</b> <b>5B</b>	Reproducing Bite Marks (Manual pp 127 – 129) The Refractive Index of Glass Fragments by Becke Line Observation (Manual 31 – 32, 34 – 35, see handout)
7	Feb. 26, 27	<b>29</b>	Separation of Ink Dyes Using Thin Layer Chromatography (Manual pp 251 – 254)
	March 5, 6		SPRING BREAK

(continued)

8	March 12, 13	<b>17A, B --</b>	HAIR: Examination of Hair by Microscopy (Manual 145 – 149) Hair Identification
	TBD		LAB EXAM #1 (covering lab periods 1 – 7)
9	March 19, 20	<b>18A --</b>	FIBERS: Identification of Textile Fibers (Manual 159 – 164) IR Analysis of Fibers, for background read Manual pp 191 – 193
10	March 26, 27	<b>-- --</b>	DRUGS: Presumptive and Confirmatory Drug Tests (see handout) GC-MS Analysis of Drugs (if instrument is available), for background read S pp 150 - 154 (see handout)
11	April 2, 3	<b>19A,B -- --</b>	DRUGS: A Qualitative Test for Marijuana (Manual 173 – 175) Drug Analysis using NIK Tests, for background read Manual pp 181 – 185 (see handout) IR Analysis of drugs, for background reread Manual pp 191-195
12	April 9, 10	<b>-- 9A,B</b>	SEROLOGY: Immunoassay Experiment (see handout) Blood Identification and Typing (Manual 71 – 77)
13	April 16, 17	<b>40 11</b>	DNA Fingerprinting I EDVO-Kit #109 (Manual 333 – 350) Fingerprinting (Manual 87 – 111)
14	April 23, 24		LAB EXAM #2 (covering lab periods 8 – 13)

\*S stands for **Criminalistics – An Introduction to Forensic Science**, ninth edition, by Richard Saferstein, Pearson Prentice Hall, 2007.

\*\*Manual stands for **Lab Manual – Criminalistics – An Introduction to Forensic Science**, by for Clifton E. Meloan, Richard E. James and Richard Saferstein, Pearson Prentice Hall, 2007.

\*\*\*J stands for **Investigating Chemistry – A Forensic Science Perspective**, by Matthew E. Jhll, W. H. Freeman and Company, 2007.