**CHEM 304 Schedule of Experiments**

**Spring 2018 (Revised)**

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| **Week Of** |  | **Experiment** |  | **Instruments** | **Report Due** |
| January 08 |  | **NO LABS** |  |  |  |
| January 15 |  | **NO LABS** |  |  |  |
| January 22 |  | Introduction and Molecular Modeling\* |  |  | ----- |
| January 29 |  | Recrystallization and Melting Point (T) |  | mp | Modeling\* |
| February 05 |  | Extraction of Caffeine (T) |  | GCMS, mp | Recrystallization |
| February 12 |  | Distillation and Gas Chromatography (T) |  | GC | Extraction |
| February 19 |  | Friedel-Crafts Acylation (R) |  | IR, 1H-NMR | Distillation |
| February 26 |  | Grignard Reaction (R) |  |  | Acylation |
| March 05 |  | Grignard Reaction |  | mp, IR | ----- |
| March 12 |  | **----SPRING BREAK----** |  |  | ----- |
| March 19 |  | Fischer Esterification (R) |  | 13C-NMR | Grignard |
| March 26 |  | Thin Layer and Column Chromatography (T) |  |  | Fischer |
| April 02 |  | Aldol Condensation (R) |  | 1H-NMR | TLC |
| April 09 |  | Hydrogenation of Snack Food (R) |  | 1H-NMR | Aldol |
| April 16 |  | Column Chromatography (T) |  |  | Hydrogenation |
| April 23 |  | **NO LABS** |  |  | Column |

\* The modeling assignment is not a lab report and does not follow the report guidelines.

(T) – Denotes Technique Experiment

(R) – Denotes Reaction Experiment