# CHEM 304: Organic Chemistry Laboratory

*(Sections 001-003)*

**Spring 2019**

# Schedule of Experiments

|  |  |  |  |
| --- | --- | --- | --- |
| **Week of** | **Experiment** | **Assignment Due** | **Analysis** |
| Jan. 7 | **NO LABS** | **-------** |  |
| Jan. 14 | Introduction and Molecular Modeling\* | **-------** |  |
| Jan. 21 | Recrystallization and Melting Point (T) | *Molecular Modeling\** |  |
| Jan. 28 | Extraction of Caffeine (T) | *Recrystallization* | GC-MS |
| Feb. 4 | Distillation and Gas Chromatography (T) | *Extraction* | GC |
| Feb. 11 | Thin Layer Chromatography (T) | *Distillation* |  |
| Feb. 18 | Column Chromatography (T) | *TLC* |  |
| Feb. 25 | Friedel-Crafts Acylation (R) | *Column* | IR, 1H-NMR |
| Mar. 4 | Grignard Reaction (R) | *Acylation* |  |
| Mar. 11 | **NO LABS – Spring Break**  | **-------** |  |
| Mar. 18 | Grignard Reaction | *Grignard* | Mp, IR |
| Mar. 25 | Fischer Esterification (R) |  | 13C-NMR |
| Apr. 1 | Aldol Condensation (R) | *Fischer* | 1H-NMR |
| Apr. 8 | Hydrogenation of Fat in Snack Foods (R) | *Aldol* | 1H-NMR |
| Apr. 15 | **NO LABS** | *Hydrogenation* |  |
|  |  |  |  |

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

(T) – Denotes Technique Experiment

(R) – Denotes Reaction Experiment