

**Chemical Engineering 512**  
**Class Schedule and Assignments (Subject to Change)**  
**Fall 2023**

| Class     | Date              | Topic                                      | DVD - Sections | HW Due   |
|-----------|-------------------|--------------------------------------------|----------------|----------|
| 1         | T--Sep 5          | Code Setup, Introduction                   | -              | -        |
| 2         | Th--Sep 7         | Export Control, Final Project Introduction | 1-4            | -        |
| 3         | T--Sep 12         | Code Overview, Input Description           | 5,6            | 1        |
| 4         | Th--Sep 14        | Input Description                          | 7,11           | -        |
| 5         | T--Sep 19         | Input Description, Output Description      | 12-17          | 2        |
| 6         | Th--Sep 21        | Heat Structure Input                       | 18-24          | -        |
| 7         | T--Sep 26         | Valves, Form Losses, Wall Friction         | 25-27,30-32    | 3        |
| 8         | Th--Sep 28        | Point Kinetics and Combining Structures    | 33-38          | -        |
| 9         | T--Oct 3          | Pump Curves                                | 39-43          | 4        |
| 10        | Th--Oct 5         | Transient Analyses, PWR                    | 44-52          | -        |
| 11        | T--Oct 10         | Numerical Stability                        | 53-57          | 5        |
| 12        | Th--Oct 12        | Batch Files, Rapid Prototyping             | 58-63          | -        |
| 13        | T--Oct 17         | Control Variables, Tables                  | 64-71          | 6        |
| 14        | Th--Oct 19        | Modeling a PWR Core                        | 72-78          | -        |
| 15        | T--Oct 24         | PYGI, Restart File                         | -              | 7        |
| 16        | Th--Oct 26        | Debugging I                                | -              | -        |
| 17        | T--Oct 31         | Debugging II                               | -              | 8        |
| 18        | Th--Nov 2         | Advanced Control Variables                 | -              | -        |
| 19        | T--Nov 7          | Kinetics                                   | -              | 9        |
| 20        | Th--Nov 9         | Final Project Work                         | -              | -        |
| 21        | T--Nov 14         | Final Project Work                         | -              | 10       |
| 22        | Th--Nov 16        | Final Project Work                         | -              | -        |
| <b>23</b> | <b>T--Nov 21</b>  | <b>Friday Classes</b>                      | <b>-</b>       | <b>-</b> |
| <b>24</b> | <b>Th--Nov 23</b> | <b>Thanksgiving Break</b>                  | <b>-</b>       | <b>-</b> |
| 25        | T--Nov 28         | Final Project Work                         | -              | -        |
| 26        | Th--Nov 30        | Final Project Work                         | -              | -        |
| 27        | T--Dec 5          | Final Project Work                         | -              | -        |
| 28        | Th--Dec 7         | Final Project Work                         | -              | -        |
| <b>29</b> | <b>Th--Dec 12</b> | <b>Final Project Presentations</b>         |                |          |
| <b>30</b> | <b>Th--Dec 14</b> | <b>Final Project Presentations</b>         |                |          |