NOTES:
1: Several modules are suitable for more than one engineering course. Please coordinate with other faculty. Example: Block A can be assigned to any of the first 3 core courses, or distributed within them.
2: Some courses (e.g. Organic Chem or Materials) may be outside of typical ChE departments but usually part of core requirements for Chemical Engineers. The assignments below should be shared across department boundaries.
3: Some courses go together as a group as indicated below and are related to each other
4: it is highly recommended that all engineering graduates complete Block A at the beginning of their ChE education and Block F before graduation

No.	Course Title	Grouping	Introduction to Chemical Engineering OR Intro to Engineering	Material & Energy Balances	Thermodynamics	Material Science / Corrosion Engineering	Organic / Inorganic Chemistry	Rate Operations / Kinetics / Reaction Eng	Fluid Flow / Fluid Mechanics	Heat & Mass Transfer	Unit ups & Separation Processes (e.g. Distillation)	Process Control	Unit Ops Lab	Process / Engineering Design	Advanced Reaction engineering	Advanced Transport Phenomina	ChE process Modeling / Simulation	Chemical Engineering Practice / Leadership for Chemical Engineers	Special Topics in Process Safety	Graduate program (MS, PhD)	Process Safety (standalone course)
ELA 950	Introduction to Process Safety	A	■	■	■																■
ELA 951	Hazard Recognition		■	■	■																■
ELA 952	Identifying & Minimizing Process Safety Hazards		■	■	■																■
ELA 953	An Introduction to Managing Process Safety Hazards		■	■	■																■
ELA 954	Introduction to Lab Safety												■								
ELA 961	Toxicological Hazards	B	■				■						■								■
ELA 962	Chemical Reactivity Hazards		■				■	■					■								■
ELA 963	Fire Hazards		■		■			■					■								■
ELA 964	Explosion Hazards				■			■					■								■
ELA 965	Source Models	C							■	■						■					■
ELA 967	Atmospheric Dispersion								■	■						■	■		■		■
ELA 969	Understanding Hazards & Risk	D											■	■							■
ELA 970	Hazards and Risk: What Can Go Wrong?												■	■							■
ELA 971	Hazards and Risk: Introduction to Pressure Protection								■	■	■	■	■	■							■
ELA 973	Hazards and Risk: Safeguards Other Than Relief Systems										■			■							■
ELA 974	Hazards and Risk: Introduction to Hazard Identification and Risk Analysis													■							■
ELA 975	Process Safety Ethics – A Brief Introduction	A	■	■	■														■	■	■
ELA 980	Risk Review Using Layer of Protection Analysis (LOPA)											■		■			■				■
ELA 981	Human Factors in Process Safety																	■	■	■	■
ELA 984	Inherently Safer Designs													■	■	■					■
ELA 985	Practical Process Safety 1	E				■					■			■			■				■
ELA 987	Practical Process Safety 2					■					■			■			■				■
ELA 988	Damage Mechanisms: Asset Integrity and Reliability					■								■							■
ELA 989	Runaway Reactor and Overpressure Protection							■							■		■				■
ELA 990	Facility Siting													■					■		■
ELA 991	Role of Inert Gases in Process Safety							■			■		■		■						■
ELA 992	Dust Explosions															■			■		■
ELA 993	Common Chemicals and Their Major Hazards						■								■						■
ELA 995	Risk Based Process Safety - Commit to Process Safety	F																		■	■
ELA 996	Risk Based Process Safety - Manage Risk: Training and Procedures																			■	■
ELA 997	Risk Based Process Safety - Manage Risk: Operations																			■	■
ELA 998	Risk Based Process Safety - Manage Risk: Asset Integrity					■								■						■	■
ELA 999	Risk Based Process Safety - Learn from Experience																			■	■