

## Chemical Engineering

### Teaching Schedule, 2019-2020

<i>CRSE</i>	<i>COURSE TITLE</i>	<i>FALL</i>	<i>WINTER</i>	<i>SPRING</i>
		Time/Days Professor	Time/Days Professor	Time/Days Professor
190	Engineering of Chemical and Biological Processes			
210	Analysis of Chemical Process Systems	1 MTWF Lab 2-4, 4-6 M or 3-5 T <b>Miller</b>		9 MTWF Lab 12-2, 2-4, or 4-6 M <b>Torkelson</b>
211	Thermodynamics	1 MTWF <b>Richards</b>	1 MTWF <b>Masanet</b>	
212	Phase Equilibrium and Staged Separations		10 MTWF <b>Dallbauman</b>	2 MTWF <b>Dranoff</b>
275	Molecular and Cell Biology for Engineers		2-3:50 TTh <b>Stringer</b>	
307	Kinetics and Reactor Engineering			10 MTWF <b>Kung</b> 1 MTWF <b>Broadbelt</b>
312	Probability and Statistics for Chemical Engineering		2-3:20 MWF <b>Amaral</b>	
321	Fluid Mechanics	2 MTWF <b>Burghardt</b>		
322	Heat Transfer		11 MTWF <b>Wang</b>	
323	Mass Transfer			3 MTWF 4 T (Discussion) <b>Tyo</b>
330	Molecular Engineering and Statistical Mechanics			
341	Dynamics and Control of Chemical and Biological Processes		10 MTWF <b>Bagheri</b>	
342	Chemical Engineering Laboratory	9-5:20 Th <b>Maher</b>	9-5:20 Th <b>Maher</b>	9-5:20 Th <b>Maher</b>
345	Process Optimization for Energy and Sustainability		1 MTWF <b>Dallbauman</b>	
351	Process Economics, Design, and Evaluation	12 MTWF <b>Cole</b>	12 MTWF <b>Notestein</b>	
352	Chemical Engineering Design Projects		3-5:50 T <b>Cole/ Wegerer</b>	3-5:50 W <b>Kung/ Wegerer</b>
355	Chemical Product Design			11 MWF <b>Notestein</b>
361	Introduction to Polymers	10 MTWF <b>Torkelson</b>		
364	Chemical Processing and the Environment			
365	Sustainability, Technology, and Society	3-4:50 TTh <b>Kung</b>		
367	Quantitative Methods in Life Cycle Analysis			12:30-1:50 MW <b>Masanet</b>
372	Bionanotechnology		4 MWF <b>Kourkine</b>	
373	Biotechnology and Global Health	3 MWF <b>Tyo</b>		

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		Time/Days Professor	Time/Days Professor	Time/Days Professor
375	Biochemical Engineering		9 MTWF <b>Jewett</b>	
376	Synthetic Biology	9 MTWF <b>Jewett</b>		
377/ 477	Bioseparations			9 MTWF <b>Kourkine</b>
379	Computational Biology: Principles and Applications			10 MTWF <b>Leonard</b>
381	Practical Biological Imaging			
382	Biotechnology Regulatory Science			6-7:50 MW <b>Felse</b>
390	Personal and Organizational Effectiveness			
395	Special Topics in Chemical Engineering	4-5:20 MW <b>Ryskin<sup>1</sup></b>	1 MTWF <b>Tullman- Ercek<sup>2</sup></b>  4-5:20 MW <b>Ryskin<sup>3</sup></b>  12:30-1:50 TTh <b>Bagheri<sup>4</sup></b>	2-3:50 TTh <b>Lucks<sup>5</sup></b>  2 MWF <b>Wang<sup>6</sup></b>  12:30-1:50 TTh <b>Bagheri<sup>7</sup></b>
404	Advanced Thermodynamics		2-3:50 MW <b>Lucks</b>	
406	Selected Topics in Thermodynamics			4-5:20 MW <b>Ryskin<sup>8</sup></b>
408	Chemical Engineering Kinetics and Reactor Design	11 MTWF <b>Seitz</b>		
409	Advanced Reactor Design			
410	Principles of Heterogeneous Catalysis		4-5:50 TTh <b>Abrevaya</b>	
421	Fluid Mechanics	2 MTWF <b>Wang</b>		
422	Heat and Mass Transfer		11 MTWF <b>Richards</b>	
451	Applied Molecular Modeling		1 MTWF <b>Snurr</b>	
462	Viscoelasticity and Flow in Polymer Systems			
463	Polymerization Reaction Engineering			10-11:50 TTh <b>Torkelson</b>

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- 1 - Introduction to Differential Geometry (Fall Quarter – Prof. Ryskin)
  - 2 - Protein Engineering (Winter Quarter – Prof. Tullman-Ercek)
  - 3 - Quantum Mechanics and Path Integrals (Winter Quarter – Prof. Ryskin)
  - 4 - Science Policy (Spring Quarter – Prof. Bagheri)
  - 5 - Advanced Principles of Biomolecular Engineering (Spring Quarter – Prof. Lucks)
  - 6 - Advanced Probability and Statistics (Spring Quarter – Prof. Wang)
  - 7 - Machine Learning (Spring Quarter – Prof. Bagheri)
  - 8 - Introduction to Statistical Thermodynamics

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		Time/Days Professor	Time/Days Professor	Time/Days Professor
475	Cell-Material Interactions			
478	Advances in Biotechnology			12-1:50 W 1-1:50 F <b>Leonard</b>
489	Selected Topics in Chemical Engineering			

Notes:

DTC: Seitz (1 section), Miller  
(2 sections).

Tullman-Ercek will teach MBP  
476 as well.