

FALL 2013 COURSE OFFERINGS

THE COOPER UNION for the ADVANCEMENT OF SCIENCE AND ART
 ALBERT NERKEN SCHOOL OF ENGINEERING
FALL 2013 - COURSE OFFERINGS (9/17/13)

<u>BIOLOGY</u>	<u>COURSE NAME</u>	<u># OF CREDITS</u>	<u>FACULTY</u>	<u>TIME</u>	<u>ROOM</u>
BIO 102	BIOLOGICAL SYSTEMS <i>(Maximum Section Enrollment: 30)</i>	3 cr.	Medvedik	T 6p – 9p	101
<u>CHEMISTRY</u>					
Ch 110 A	GENERAL CHEMISTRY <i>(Maximum Section Enrollment: 30)</i>	3 cr.	Sharaffeddin	T 6p – 8p Th 6p – 8p	505 505
Ch 110 B	GENERAL CHEMISTRY <i>(Maximum Section Enrollment: 30)</i>	3 cr.	Newmark	W 3p – 5p F 11a – 1p	105 105
Ch 110 D	GENERAL CHEMISTRY <i>(Maximum Section Enrollment: 30)</i>	3 cr.	Bastos	Tu 5p – 7p Th 6p – 8p	502 504
Ch 111 C3	CHEMISTRY LABORATORY <i>(Maximum Section Enrollment: 16)</i>	1.5 cr.	Bastos	F 2p – 5p	427/404
Ch 111 C4	CHEMISTRY LABORATORY <i>(Maximum Section Enrollment: 16)</i>	1.5 cr.	R. Topper	W 9a-12p	506/404
Ch 160 C.1	PHYSICAL PRINCIPLES OF CHEMISTRY <i>(Maximum Section Enrollment: 30)</i>	3 cr.	R. Topper	T 2p – 4p F 9a – 11a	101 101
Ch 231	ORGANIC CHEMISTRY I <i>(Maximum Section Enrollment: 30)</i>	3 cr.	Savizky	M 3p – 5p F 11a – 12p	427 101
Ch 251 A	INSTRUMENTAL ANALYSIS LABORATORY <i>(Limited to 10)</i>	2 cr.	Newmark	M 1p – 5p	503/407
Ch 251 B	INSTRUMENTAL ANALYSIS LABORATORY <i>(Limited to 10)</i>	2 cr.	Savizky	Th 12p – 4p	427/407

FALL 2013 COURSE OFFERINGS

Ch 251 C	INSTRUMENTAL ANALYSIS LABORATORY <i>(Limited to 10)</i>	2 cr.	Kolack	F	12p – 4p	427/407
Ch 261	PHYSICAL CHEMISTRY I <i>(Maximum Enrollment: 30)</i>	3 cr.	Topper	T W	9a – 11a 12p – 1p	427 427
Ch 440	BIOCHEMISTRY II <i>(Maximum Enrollment: 20)</i>	3 cr.	Savizky	W	2p – 5p	LL210

FALL 2013 COURSE OFFERINGS

CHEMICAL ENGINEERING

ChE 131	ADV CHEMICAL ENG THERMODYNAMICS (Class limited to 30 students)	3 cr.	Irv Brazinsky	Tu	11a – 12p	427
				Th	9a – 11a	427
ChE 142	SEPARATION PROCESS PRINCIPLES (Class limited to 30 students)	3 cr.	Davis	Tu	2p – 4p	105
				W	11a – 12p	503
ChE 152	CHEMICAL PROCESS DYNAMICS & CONTROL (Class limited to 30 students)	3 cr.	Okorafor	M	11a – 1p	101
				W	9a – 11a	427
ChE 161.1	PROCESS EVAL. & CHEM. SYSTEMS DESIGN I (Class limited to 30 students)	3 cr.	Stock	M	1p – 3p	101
				Th	11a – 12p	101
ChE 162.1 A	CHEMICAL ENGINEERING LAB I (Classes limited to 15 students)	1.5 cr.	Lepek	Th	12p – 4p	304
ChE 162.1 B	CHEMICAL ENGINEERING LAB I (Classes limited to 15 students)	1.5 cr. -	Brazinsky	W	12p – 4p	304
ChE 421	ADVANCED CHEMICAL REACTION ENG. (Classes limited to 20 students)	3cr.	Davis	M	4p – 6p	105
				Th	10a – 11a	106
ChE 445	PARTICLE TECHNOLOGY (Class limited to 15)	3 cr.	D. Lepek	Tu	9a – 11a	201
				Th	9a – 10a	106
ChE 488	CONVEX OPTIMIZATOIN (Class limited to 20)	3 cr.	B. Davis	Tu	10a – 11a	106
				W	4p – 6p	106
ChE 490	PROCESS SYNTHESIS – (Class limited to 12)	3 cr.	Okorafor	T	2p – 5p	801

CIVIL ENGINEERING

CE 121	STRUCTURAL ENGINEERING I (Class limited to 30 students)	4.5 cr.	C. Tzavelis	W	12 – 1P	505
				W	2P – 5P	LL220
				Th	3p – 5p	505
CE 141	ENVIRONMENTAL SYSTEMS ENGINEERING (Class limited to 30 students)	4.5 cr.	Yapijakis	M	5p – 7p	504
				T	2p – 5p	LL201/104
				Th	2p – 3p	505
CE 331	FOUNDATION ENGINEERING (Class limited to 30 students)	3 cr.	Guido	M	11a - 1p	503
				Th	11a – 12p	503
CE 342	DESIGN OF REINFORCED CONCRETE STRUC. (Class limited to 30 students)	3 cr.	J. Ahmad	Tu	11a – 12p	503
				Th	2p – 4p	504
CE 351	URBAN TRANSPORTATION PLANNING- (Class limited to 30 students)	3 cr.	Lennon	W	6p – 9p	503
CE 363	CIVIL ENGINEERING DESIGN I - (Class Limited to 30 students)	3 cr. –	J. Ahmad, Cataldo, Guido	T	2p - 5p	503
CE 425\EID 425	STRUCTURAL DYNAMICS (Class limited to 30 students)	3 cr.	Smilowitz	M	6p - 9p	503
CE 433	ADVANCED TOPICS IN GEOTECH. ENGR. (Class limited to 30 students)	3 cr.	Guido	M	2p – 4p	503
				Th	1p – 2p	503
CE 442	OPEN CHANNEL HYDRAULICS (Class limited to 30 students)	3 cr.	Cataldo	W	10a – 1p	504
CE 448(EID 448)	ENVIRONMENTAL & SANITARY ENGINEERING (Class limited to 20 students)	3 cr.	Yapijakis	Th	6p-9p	106
CE 450	CIVIL ENGINEERING CONSTRUCTION (Class limited to 20 students)	3 cr.	Salvatoriello	T	6p – 9p	503

FALL 2013 COURSE OFFERINGS

5

ELECTRICAL ENGINEERING

ECE 101	COMMUNICATIONS THEORY <i>Maximum Enrollment: 32</i>	3 cr.	F. Fontaine	T	10a – 12p	506
				F	9a – 11a	506
ECE 114A	DIGITAL SIGNAL PROCESSING <i>Maximum Enrollment: 20</i>	3 cr.	S. Keene	M	2p – 3p	106
				T	6p – 8p	105
ECE 114B	DIGITAL SIGNAL PROCESSING <i>Maximum Enrollment: 24</i>	3 cr.	S. Keene	T	5p – 6p	105
				W	11a – 1p	105
ECE 121A	CONTROL SYSTEMS I <i>Maximum Enrollment: 15</i>	3 cr.	Shinners	M	11a – 2p	105
ECE 121B	CONTROL SYSTEMS I <i>Maximum Enrollment: 15</i>	3 cr.	H. Ahmad	M	1p – 2p	106
				Th	1p – 3p	502
ECE 132	ELECTROMECHANICAL ENERGY CONVERSION <i>Maximum Enrollment: 24</i>	3 cr.	Shinners	F	9am-12pm	502
ECE 140 A	CIRCUIT ANALYSIS <i>Maximum Enrollment: 20</i>	3 cr.	H. Ahmed	M	2p – 4p	506
				Th	3p – 4p	502
ECE 140 B	CIRCUIT ANALYSIS <i>Maximum Enrollment: 20</i>	3 cr.	H. Ahmed	T	2p – 4p	LL210
				Th	4p-5p	502
ECE 142	ELECTRONICS II <i>Maximum Enrollment: 32</i>	3 cr.	T. Cumberbatch	W	4p – 5p	101
				Th	3p - 5p	506
ECE 150	DIGITAL LOGIC DESIGN <i>Maximum Enrollment: 30</i>	3 cr.	Y. Risbud	Th	2p - 5p	104
ECE 161	PROGRAMMING LANGUAGES <i>Maximum Enrollment: 25</i>	3 cr.	S. Kirtman	W	12p - 3p	104

FALL 2013 COURSE OFFERINGS		6				
ECE 165	DATA STRUCTURES & ALGORITHMS II <i>Maximum Enrollment: 30</i>	2 cr.	C. Sable	W	1p - 3p	502
ECE 193 A/B	ELEC. & COMPUTER ENG. PROJS. I <i>Maximum Enrollment per section: 15</i>	1.5 cr.	S. Kirtman (A & B alt. wks.)	T	2p - 5p	604
ECE 195 A	ELEC. & COMPUTER ENG. PROJECTS III <i>Maximum Enrollment : 18</i>	4 cr.	T. Cumberbatch	T	2p - 6p	106
ECE 195 B	ELEC. & COMPUTER ENG. PROJECTS III <i>Maximum Enrollment: 18</i>	4 cr.	C. Sable	T	2p - 6p	201
ECE 311	MODERN DSP HARDWARD <i>Maximum Enrollment: 20</i>	3 cr.	Hoerning	T	6p-9p	LL210
ECE 357	COMPUTING OPERATING SYSTEMS <i>Maximum Enrollment: 30</i>	3 cr.	Hakner	Th	6p – 9p	LL101
ECE 410	RADAR AND SENSOR ARRAY PROCESSING <i>Maximum Enrollment: 30</i>	3cr.	Fontaine	T Th	9a – 10a 9a – 11a	503 503
ECE 414	MACHINE LEARNING <i>Maximum Enrollment: 24</i>	3 cr.	Keene	M W	4p – 6p 4p – 5p	503 502
ECE 431	MICROWAVE ENGINEERING <i>Maximum Enrollment: 20</i>	3 cr.	Hausman	W	6p - 9p	106
ECE 469	ARTIFICIAL INTELLIGENCE <i>Maximum Enrollment: 30</i>	3 cr.	C. Sable	W Th	5p – 6p 1p – 3p	502 506

COMPUTER SCIENCES

CS 102 A/C	COMPUTER PROGRAMMING FOR ENG. (Class limited to 30)	3 cr	Lent	T W	5p-6p 5p – 6p	504 504
CS 102 B/D	COMPUTER PROGRAM. FOR ENGINEERS (Class limited to 30)	3 cr.	Hopkins	M	4p-6p	506
CS 102 E	COMPUTER PROG. FOR ENG. (Class limited to 30)	3 cr.	S. Cusack	W	6p-8p	506

LABS

CS 102 A/C	COMPUTER PROG. FOR ENG.	3 cr.	B. Cusack	M	9a-10a	505
CS 102 B/D	COMPUTER PROG. FOR ENG.	3 cr.	B. Cusack	W	12p – 1p	506
CS 102 E	COMPUTER PROG. FOR ENG.	3 cr.	B. Cusack	W	4p – 5p	104

INTERDISCIPLINARY COURSES

EID 101 A	ENGINEERING DESIGN & PROBLEM SOLVING <i>(Maximum Enrollment: 30)</i>	3 cr.	T. Cumberbatch	T Th	11a – 12p 12p – 2p	Rose/101 Rose/101
EID 101B	ENGINEERING DESIGN & PROBLEM SOLVING <i>(Maximum Enrollment: 30)</i>	3 cr.	C. Tzavelis	T Th	11a – 12p 12p – 2p	Rose/104 Rose/104
EID 101C	ENGINEERING DESIGN & PROBLEM SOLVING <i>(Maximum Enrollment: 20)</i>	3 cr.	G. Delagrammatikas	T Th	11a – 12p 12p – 2p	Rose/LL210 Rose/LL210
EID 101D	ENGINEERING DESIGN & PROBLEM SOLVING <i>(Maximum Enrollment: 30)</i>	3 cr.	D. Wootton	T Th	11a – 12p 12p – 2p	Rose/201 Rose/105
EID 105/ME105	DRAWING & SKETCHING FOR ENGINEERS <i>(Maximum Enrollment: 30)</i>	2 cr.	Dell	Th	6p - 9p	502
EID 120	FOUNDATIONS OF BIOENGINEERING	3 cr.	Orishimo	W	6p – 9p	502
EID 122	BIOMATERIALS	3 cr.	W. Hyman	M	6p – 9p	104
EID 170	ENGINEERING ECONOMY <i>(Maximum Enrollment: 30)</i>	3 cr.	Barrett	T	2p-5p	502
EID 320	SPECIAL TOPICS IN BIOENGINEERING <i>(Maximum Enrollment: 12)</i>	3 cr.	Medvedik	Th	6p – 9p	427
EID 370	ENGINEERING MANAGEMENT <i>(Maximum Enrollment: 30)</i>	3 cr.	Barrett	T	6p-9p	427
EID 374	BUSINESS ECONOMICS <i>(Enrollment Limited to 20)</i>	3 cr.	Synnott	T Th	4p-6p 12p-1p	427/803 503/803

EID 424	BIOENGINEERING APPS IN SPORTS MEDICINE - 3 cr. <i>(Maximum Enrollment: 30)</i>	Kremenec	M	5p-8p	101
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ENGINEERING SCIENCE

ESC 000.1	FIRST YEAR SEMINAR SERIES I	0 cr.	Stock	M	12p - 1p	Rose/427
ESC 000.3	SOPHOMORE SEMINAR SERIES	0 cr.	Stock	Th	2p - 3p	Rose/503
ESC 100 C	ENGINEERING MECHANICS (Maximum Enrollment: 30)	3 cr.	Hapij	T	6p-9p	504
ESC 100 M	ENGINEERING MECHANICS (Maximum Enrollment: 30)	3 cr.	Sidebotham	T Th	4p - 6p 12p -1p	506 506
ESC 110 C	MATERIALS SCIENCE (Maximum Enrollment: 30)	3 cr.	Lima	T F	4p – 6p 2p - 3p	505 505
ESC 110 M	MATERIALS SCIENCE (Maximum Enrollment: 30)	3 cr.	Lima	W F	1p – 3p 1p - 2p	503 505
ESC 120K/121K	PRINCIPLES OF ELECTRICAL ENGINEERING (Maximum Enrollment: 30 combined)	3cr.	Ungar	M Th	9a-11a 11a – 12p	427 504
ESC 130 C	ENGINEERING THERMODYNAMICS (Maximum Enrollment: 30)	3 cr.	Speyer	M W	1p - 3p 1p - 2p	LL101 506
ESC 130 M	ENGINEERING THERMODYNAMICS (Maximum Enrollment: 30)	3 cr.	Sidebotham	M W	10a-12p 11a-12p	505 505
ESC 140 C	FLUID MECHS & FLOW SYS. (Maximum Enrollment: 30)	3 cr.	Cataldo	T	9a - 12p	504
ESC 140 K	FLUID MECHS & FLOW SYS. (Maximum Enrollment: 30)	3 cr.	Brazinsky	T W	2p – 4p 11a – 12p	427 427
ESC 140 M*	FLUID MECHS & FLOW SYS. (Maximum Enrollment: 30)	3 cr.	Wootton	W F	3p – 5p 12p - 1p	504 504

ESC 170*	MATERIAL & ENERGY BALANCES <i>(Maximum Enrollment: 30)</i> 104	3 cr.	Okorafor	M	9 a - 11a	104
				W	11a - 12p	104

MATHEMATICS

Ma 110 A	INTRODUCTION TO LINEAR ALGEBRA <i>(Maximum Enrollment: 30 students)</i>	2 cr	P. Baily	W	1p - 3p	504
Ma 110 B	INTRODUCTION TO LINEAR ALGEBRA <i>(Maximum Enrollment: 30 students)</i>	2 cr.	Mintchev	W	1p - 3p	101
Ma 110 D	INTRODUCTION TO LINEAR ALGEBRA <i>(Maximum Enrollment: 30 students)</i>	2 cr.	Schweitzer	W	4p - 6p	505
Ma 110 E	INTRODUCTION TO LINEAR ALGEBRA <i>(Maximum Enrollment: 30 students)</i>	2 cr.	Schweitzer	M	3p - 5p	505
Ma 111 A	CALCULUS I <i>(Maximum Enrollment: 30 students)</i>	4 cr.	Baily	T	2p - 4p	506
				W	10a - 11a	506
				F	12p - 2p	506
Ma 111 B	CALCULUS I <i>(Maximum Enrollment: 30 students)</i>	4 cr.	Mintchev	M	1p - 3p	427
				T	2p - 4p	505
				W	5p - 6p	101
Ma 111 D	CALCULUS I <i>(Maximum Enrollment: 30 students)</i>	4 cr.	Vulakh	M	11a - 12p	427
				W	9a - 11a	505
				F	9 a -11a	505
Ma 111 E	CALCULUS I <i>(Maximum Enrollment: 30 students)</i>	4 cr.	Agrawal	M	11-12	502
				M	1-3	504
				F	12p - 2p	104
Ma 113 C	CALCULUS II <i>(Maximum Enrollment: 30 students)</i>	4 cr.	Vulakh	M	1p - 3p	505
				W	1p - 3p	505
				F	11a - 12p	505

Ma 223 C	VECTOR CALCULUS (Maximum Enrollment: 30 students)	2 cr.	Shrubshick	T	9a – 11a	502
				F	9a – 10a	503
Ma 223 E	VECTOR CALCULUS (Maximum Enrollment: 30 students)	2 cr.	Ronan	M	9-11am	503
				T	4-5p	105
Ma 223 K	VECTOR CALCULUS (Maximum Enrollment: 30 students)	2 cr.	Bailyn	T	10a – 12	505
				F	3p – 4p	506
Ma 223 M	VECTOR CALCULUS (Maximum Enrollment: 30 students)	2 cr.	Vulakh	M	3p – 5p	504
				F	8-9a	505
Ma 224 C	PROBABILITY (Maximum Enrollment: 30 students)	2 cr.	Schrubschik	T	11a – 12p	502
				F	10a – 12p	503
Ma 224 K	PROBABILITY (Maximum Enrollment: 30 students)	2 cr.	Agrawal	T	9a – 10a	505
				Th	9a – 11a	504
Ma 240 E	ORDINARY & PARTIAL DIFFERENTIAL EQUATIONS 3 cr. (Maximum Enrollment: 30 students)	3 cr.	Slome	M	4p – 6p	LL101
				W	5p – 6p	105
Ma 240 M	ORDINARY & PARTIAL DIFFERENTIAL EQUATIONS 3 cr. (Maximum Enrollment: 30 students)	3 cr.	Kumaresan	T	9-10a	105
				W	11a – 1p	101
Ma 326	LINEAR ALGEBRA (Maximum Enrollment: 30 students)	3 cr.	Mintchev	M	3p – 4p	101
				W	9a – 11a	105
Ma 350	ADVANCED CALCULUS I (Maximum Enrollment: 25 students)	4 cr.	Agrawal	M	9a – 11a	105
				Th	11a – 1p	502

MECHANICAL ENGINEERING

ME 100	STRESS & APPLIED ELASTICITY <i>(Maximum Enrollment: 30)</i>	3 cr.	Kutt	Th	11a - 2p	505
EID 105/ME105	DRAWING & SKETCHING FOR ENGINEERS <i>(Maximum Enrollment: 30)</i>	2 cr.	Dell	Th	6p - 9p	502
ME 141	FUNDAMENTALS OF AERODYNAMICS <i>(Maximum Enrollment: 30)</i>	3 cr.	Kutt	M	11a - 2p	506
ME 151L	FEEDBACK CONTROL SYSTEMS <i>(Maximum Enrollment: 30)</i>	3 cr.	Baglione	T	2p - 5p	504
ME 151ABCD	FEEDBACK CONTROL SYSTEMS <i>(Maximum Enrollment: 8 per section)</i>	3 cr.	Baglione	A: F B: F C: F D: F	10a - 11a 11a - 12p 1p - 2p 2p - 3p	709 709 709 709
ME 163	MECHANICAL ENGINEERING PROJECTS <i>(Maximum Enrollment: 30)</i>	3 cr.	Wei, Lima & Baglione	Th	2p -5p	LL101
ME 312	MANUFACTURING ENGINEERING <i>(Maximum Enrollment: 30)</i>	3 cr.	Wei	W	2p -5p	506
ME 350	INTRO TO INDUSTRIAL DESIGN <i>(Maximum Enrollment: 12)</i>	3 cr.	Bambino	W	5p - 9p	104
ME 408	INTRO TO CAE <i>(Maximum Enrollment: 20)</i>	3 cr.	Scott Bondi	M	6p -9p	505/803
ME 412	AUTONOMOUS MOBILE ROBOTS <i>(Maximum Enrollment: 30)</i>	3 cr.	Mar	W	6p -9p	504
ME 415	INTRODUCTION TO NANOTECHNOLOGY <i>(Maximum Enrollment: 30)</i>	3cr.	Yu	Th	6p -9p	101
ME 440/CHE 440	ADVANCED FLUID MECHANICS <i>(Maximum Enrollment: 30)</i>	3 cr.	D. Wotton	W F	12p - 1p 10a - 12p	502 427
ME 494	SEL. TOPICS IN MECHANICAL ENGINEERING <i>(Maximum Enrollment: 20)</i>	3 cr	Sidebotham	M W	2p - 4 1p - 2p	104 105

PHYSICS

PH 165	Concepts of Physics	3cr.	Kreis	T Th	11-noon 11-1	105 LL101
PH 213 L	ELECTROMAGNETICS PHENOMENA <i>(Maximum Enrollment: 30)</i>	4 cr.	Wolf	M W W F	1p – 2p 4p – 5p 3p – 4p 12p – 1p	Rose Rose Rose Rose
PH 213 CEKMSP	ELECTROMAGNETICS PHENOMENA <i>(Limited to respective engineering majors)</i> <i>(Maximum Enrollment: 30)</i>	4 cr.				
			C: Wolf	M	4p – 6p	104
			E: Akkerman	Th	9a – 11a	505
			K: Akkerman	T	6p - 8p	506
			M: Chaves	M	9a - 11a	506
			SP: Marienko	M	2p – 4p	105
PH 291 L	INTRODUCTORY PHYSICS LABORATORY <i>(Maximum Enrollment: 30)</i>	1.5 cr.				
			Lecture: Wolf	Th	11a – 12p	Rose
PH 291 CEKMSP	INTRODUCTORY PHYSICS LABORATORY <i>(Maximum Enrollment: 30)</i>	1.5 cr.				
			C: Debroy	Th	3p – 5p	301
			E: Marienko	F	9a - 11a	301
			K: Debroy	W	12p - 2p	301
			M: Chaves	T	2p – 4p	301