## **COURSE MATERIALS AND SERVICE FEES:** FALL 2023



## COLLEGE OF NATURAL & AGRICULTURAL SCIENCES (CNAS)

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #			
	BIOCHEMISTRY							
015	Lab	Intro Biochemistry Laboratory	\$80.00					
162	Lec	Advanced Biochemistry Laboratory	\$150.00					
		BIO	LOGY					
002	Lab	Cellular Basis of Life	\$50.00					
003	Lab	Organisms in Their Environment	\$25.00					
005LA	Lab	Introduction to Cell and Molecular Biology Lab	\$100.00					
005B	Lab	Introduction to Organismal Biology	\$50.00					
005C	Lab	Introduction to Evolution and Ecology	\$15.00					
020	Lab	Dynamic Genome	\$100.00					
100	Lab	General Entomology	\$30.00	Entomology	100			
104	Lab	Foundations of Plant Biology	\$30.00	Botany and Plant Sciences	104			
118	Lab	Molecular Phylogenetics and Evolution	\$50.00					
121L	Lab	Microbiology Laboratory	\$100.00	Microbiology	121L			
132	Lab	Plant Anatomy	\$40.00	Botany and Plant Sciences	132			
138	Lab	Plant Development Morphology	\$30.00	Botany and Plant Sciences	138			

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
143	Lab	Plant Physiology	\$50.00	Botany and Plant Sciences	143
151	Lab	Invertebrate Zoology	\$130.00		
160L	Lab	Laboratory in Animal Behavior	\$50.00		
161A	Lab	Functional Anatomy of the Vertebrates	\$50.00		
161B	Lab	Functional Anatomy of the Vertebrates	\$50.00		
162	Lec	Insect Behavior	\$5.00	Entomology	162
163	Lab	Evolutionary Ecology of Terrestrial Vertebrates	\$120.00		
165	Lec	Restoration Ecology	\$40.00	Botany and Plant Sciences	165
170	Lab	Herpetology	\$160.00		
171L	Lab	Human Anatomy & Physiology Lab	\$100.00		
173	Lab	Insect Physiology	\$5.00	Entomology	173
		BOTANY AND P	LANT SCIENCES		
031	Lab	Spring Wildflowers	\$25.00		
104	Lab	Foundations of Plant Biology	\$30.00	Biology	104
132	Lab	Plant Anatomy	\$40.00	Biology	132
133	Lab	Taxonomy of Flowering Plants	\$40.00		
138	Lab	Plant Development Morphology	\$30.00	Biology	138
143	Lab	Plant Physiology	\$50.00	Biology	143
146	Lab	Plant Ecology	\$30.00		
165	Lec	Restoration Ecology	\$40.00	Biology	165
166	Workshop	Plant Physiological Ecology	\$30.00		

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #		
	CELL BIOLOGY AND NEUROSCIENCE						
106	Lec	Introduction to Neuroscience	\$9.00				
120L	Lec	Neuroscience Laboratory	\$40.00	Psychology	120L		
124	Lec	Systems Neuroscience	\$9.00	Psychology	124		
169	Lec	Human Embryology	\$11.00				
129	Dis	Brain Control of Bodly Function	\$12.00				
		CHEM	IISTRY				
01LA	Lab	General Chemistry	\$46.00				
01LB	Lab	General Chemistry	\$46.00				
01LC	Lab	General Chemistry	\$46.00				
1HLA	Lab	Honors General Chemistry	\$46.00				
1HLB	Lab	Honors General Chemistry	\$46.00				
1HLC	Lab	Honors General Chemistry	\$46.00				
005	Lab	Quantitative Analysis	\$46.00				
08LA	Lab	Organic Chemistry	\$46.00				
08LB	Lab	Organic Chemistry	\$46.00				
08LC	Lab	Organic Chemistry	\$46.00				
111	Lab	Physical Chemistry	\$46.00				
125W	Lab	Instrumental Methods	\$46.00				
140	Lab	Environmental Chemistry	\$46.00				
166	Lab	Advanced Structural and Synthetic Methods	\$46.00				

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #			
	ENTOMOLOGY							
010	Lec	Natural History of Insects	\$5.00					
100	Lab	General Entomology	\$30.00	Biology	100			
020	Lec	Bees and Beekeeping	\$66.67					
109	Lab	Field Entomology	\$94.00					
114	Lab	Aquatic Insects	\$100.00					
124	Lab	Agricultural Entomology	\$100.00					
126	Lec	Medical and Veterinary Entomology	\$33.00					
162	Lec	Insect Behavior	\$5.00	Biology	162			
173	Lab	Insect Physiology	\$5.00	Biology	173			
		GEN	ETICS					
272	Lab	Introduction to Imaging Bioinstrumentation	\$30.00	Electrical Engineering	272			
273	Lab	Live Imaging & Analysis of Cellular and Molecular Behaviors	\$30.00	Electrical Engineering	273			
274	Lab	Introduction to Medical Imaging & Analysis	\$30.00	Electrical Engineering	274			
		GEO	LOGY					
102B	Fld	Summer Field Geology	\$500.00					
		MATHE	MATICS					
004	Lec	Introduction to College Mathematics for Business and the Social Sciences	\$3.00					
005A	Lec	Precalculus	\$3.00					
009A	Lec	First Year Calculus	\$6.00					
009B	Lec	First Year Calculus	\$6.00					

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
009C	Lec	First Year Calculus	\$6.00		
09HA	Lec	First Year Honors Calculus	\$3.00		
09HB	Lec	First Year Honors Calculus	\$3.00		
09HC	Lec	First Year Honors Calculus	\$3.00		
010A	Lec	Calculus - Several Variables	\$3.00		
010B	Lec	Calculus - Several Variables	\$3.00		
011	Lec	Introduction to Discrete Structures	\$3.00	Computer Science	011
022	Lec	Calculus for Business	\$6.00		
046	Lec	Ordinary Differential Equations	\$6.00		
		MICROE	BIOLOGY		
121L	Lab	Microbiology Laboratory	\$100.00	Biology	121L
125	Lab	Experimental Microbiology	\$50.00		
128	Lab	Field Mycology	\$120.00		
		РНҮ	SICS		
002A	Lec	General Physics	\$5.00		
002HA	Lec	Honors General Physics	\$5.00		
002B	Lec	General Physics	\$5.00		
02HB	Lec	Honors General Physics	\$5.00		
002C	Lec	General Physics	\$5.00		
02HC	Lec	Honors General Physics	\$5.00		
02LA	Lab	General Physics Laboratory	\$25.00		

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
02HLA	Lab	Honors General Physics Laboratory	\$25.00		
02LB	Lab	General Physics Laboratory	\$25.00		
02HLB	Lab	Honors General Physics Laboratory	\$25.00		
02LC	Lab	General Physics Laboratory	\$25.00		
02HLC	Lab	Honors General Physics Laboratory	\$25.00		
008	Lec	Color and Sound	\$5.00		
010	Lec	How Things Work	\$5.00		
016	Lec	Principles of Physics	\$5.00		
040A	Lab	General Physics	\$25.00		
040HA	Lab	Honors General Physics	\$25.00		
040B	Lab	General Physics	\$25.00		
040HB	Lab	Honors General Physics	\$25.00		
040C	Lab	General Physics	\$25.00		
040HC	Lab	Honors General Physics	\$25.00		
041A	Lab	Intro Physics for Physics Major	\$50.00		
041B	Lab	Intro Physics for Physics Major	\$50.00		
041C	Lab	Intro Physics for Physics Major	\$50.00		
139L	Lab	Electronics for Scientists	\$45.00		
142L	Lab	Advanced Physics Laboratory	\$150.00		
142W	Wrk	Advanced Physics Laboratory	\$150.00		

OURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #		
ART							
01	Lec	Beginning Drawing and Design	\$20.00				
02	Lec	Beginning Painting and Design	\$40.00				
03	Lec	Intro to Photo Process	\$50.00				
05	Lec	Beginning Sculpture and 3-D Design	\$85.00				
)09	Lec	Introductory Web-Based Art: Site Creation and Navigation	\$50.00				
10	Stu	Intro to Video	\$60.00				
)32	Lec	Art Studio One	\$80.00				
)65	Lec	Introduction to Digital Printing & Drawing	\$65.00				
)66	Lec	Introduction to 3-D Digital Modeling	\$40.00	Computer Science	066		
167	Lec	Three-Dimensional Digital Modeling and Animation	\$65.00		067		
)70 E-Z	Lec	Digital Imaging Software for the Visual Arts	\$50.00				
)71 E-Z	Lec	Photographic Materials & Processes	\$50.00				
)75 E-Z	Wrk	Sculpture Materials & Processes	\$65.00				
102	Lec	Intermediate Drawing	\$20.00				
03	Lec	Advanced Drawing	\$20.00				
04	Lec	Life Drawing	\$45.00				
0	Lec	Intermediate Painting	\$40.00				
11	Lec	Advanced Painting	\$40.00				

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
112 E-Z	Wrk	Painting Materials and Processes	\$50.00		
115	Lec	Intermediate Sculpture	\$80.00		
125	Lec	Sculpture Hybrid: FAD	\$75.00		
131	Lec	Intermediate Photography & Digital Technology	\$75.00	Media & Cultural Studies	131
132	Lec	Art Studio Two	\$80.00		
133	Lec	Senior Art Workshop	\$80.00		
134	Lec	Mixed Media	\$65.00		
136	Lec	Installation & Site-Specific Art	\$65.00	Media & Cultural Studies	136
137	Lec	Advanced Sculpture	\$80.00		
139	Lec	Intermediate Web-Based Art	\$40.00		
140	Lec	Intermediate Analog Photography	\$60.00		
143	Lec	Advanced Digital Imaging Technology	\$65.00		
145	Lec	Advanced Photography Workshop	\$60.00		
146 E-Z	Lec	Topics in Advanced Photography	\$60.00		
150	Lec	Intermediate Moving Images	\$50.00	Media & Cultural Studies	150
151	Lec	Intermediate Video/Time Based Expermtatn	\$60.00		
152	Lec	Advanced Video/Time Based Expermtatn	\$60.00		
155	Lec	Advanced Moving Images	\$50.00	Media & Cultural Studies	155
162	Stu	New Genres of Art Practice	\$50.00		
165	Lec	Intermediate Vector Image Making & Printing	\$65.00		
167	Lec	Web Authoring	\$35.00		

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #		
169 E-Z	Lec	Digital Imaging Intermediate Software	\$35.00				
171	Lec	Intermediate & Advanced Sculpture/Digital	\$65.00				
175	Lec	Advanced Digital Workshop	\$65.00				
		ART H	ISTORY				
136	Lec	History of Video Art	\$10.00	Media & Cultural Studies	137		
137	Lec	History of Experimental Cinema	\$20.00	Media & Cultural Studies	138		
	GENDER AND SEXUALITY STUDIES						
148	Lec	INTRSCTNLTY, ECLGY, DSIGN SCI	\$917.00	Media & Cultural Studies	137		
	HIGHLANDER EARLY START ACADEMY						
001	Sem	Early Start Seminar	\$203.00				
		MEDIA AND CU	TURAL STUDIES				
131	Lec	Intermediate Photography & Digital Technology	\$75.00	Art	131		
136	Lec	History of Experimental Cinema	\$65.00	Art	136		
137	Lec	History of Video Art	\$10.00	Art History	136		
138	Lec	History of Experimental Film	\$20.00	Art History	137		
150	Lec	Intermediate Moving Images	\$50.00	Art	150		
155	Lec	Advanced Moving Images	\$50.00	Art	155		
		ML	ISIC				
080 (E-Z)	Stu	Private Instruction: Voice, Keyboard, and Strings	\$350.00				
081 (E-Z)	Stu	Private Instruction: Brass, Woodwinds, Percussion, and Other Instruments	\$350.00				

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
180 (E-Z)	Stu	Private Instruction: Voice, Keyboard, and Strings	\$700.00		
181 (E-Z)	Stu	Private Instruction: Brass, Woodwinds, Percussion, and Other Instruments	\$700.00		
		PSYCH	IOLOGY		
120L	Lec	Neuroscience Laboratory	\$40.00	Cell Biology and Neuroscience	120L
124	Lec	Systems Neuroscience	\$9.00	Cell Biology and Neuroscience	124
		THEATRE, FILM, AND	DIGITAL PRODUCTION		
044	Dis	Make-Up, Theatre, Film TV	\$61.00		
117	Lec	Directing for the Screen	\$130.67		
130A	Lec	Producing Short Episodic Content A	\$130.67		
130B	Lec	Producing Short Episodic Content B	\$130.67		
144	Lec	Directing Actors for the Screen I	\$130.67		
153B	Lec	Advanced Cinematography	\$130.67		
155	Lec	Intro to Digital Film Production	\$98.00		
156A	Lec	Digital Film Production	\$98.00		
156B	Lec	Digital Film Production	\$98.00		
157	Lec	Introduction to Film Editing	\$71.00		
159	Wrk	Documentary Production	\$130.67		

MARLAN AND ROSEMARY BOURNS COLLEGE OF ENGINEERING (BCOE)							
OURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #		
BIOENGINEERING							
010	Lec	Overview of Bioengineering	\$50.00				
130L	Lab	Bioinstrumentation Lab	\$50.00				
155	Lab	Biotechnology Lab	\$150.00				
175A, 175B, 175C	Lec	Senior Design	\$100.00				
CHEMICAL AND ENVIRONMENTAL ENGINEERING							
011	Lab	Intro to Bioengineering	\$30.00				
125	Lab	Analys Meths For Chem & Env Engrs	\$116.67				
			CHEMICAL ENGINEERING				
124L	Lab	Biochemical Engr Lab	\$106.67				
160A	Lab	Chem/Env Engineering Lab	\$86.67	Environmental Engineering	160A		
160B	Lab	Chemical Engineering Lab	\$133.33				
160C	Lab	Chemical Engineering Lab	\$106.67				
161	Lab	Nanotechnology Processing Lab	\$93.33				
175A	Lab	Chemical Process Design	\$50.00				
			COMPUTER SCIENCE				
005	Lab	Introduction to Computer Programming	\$30.00				
006	Lab	Effective Use of the World Wide Web	\$30.00				
008	Lab	Introduction to Computing	\$30.00				

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
010A	Lab	Introduction to Computer Science for Science, Mathematics, and Engineering I	\$30.00		
010B	Lab	Introduction to Computer Science for Science, Mathematics, and Engineering I	\$30.00		
011	Lec	Introduction to Discrete Structures	\$3.00	Mathematics	11
009A	Lab	Data Oriented Intro to Comp 1	\$40.00		
009B	Lab	Data Oriented Intro to Comp 2	\$40.00		
100	Lab	Software Construction	\$40.00		
120A	Lab	Logic Design	\$30.00	Electrical Engineering	120A
120B	Lab	Introduction to Embedded Systems	\$30.00	Electrical Engineering	120B
122A	Lab	Intermediate Embedded and Real-Time Systems	\$30.00		
122B	Lab	Advanced Embedded and Real-Time Systems	\$30.00		
135	Lab	Virtual Reality	\$40.00		
152	Lab	Compiler Design	\$30.00		
153	Lab	Design of Operating Systems	\$30.00		
160	Lab	Concurrent Programming and Parallel Systems	\$30.00		
161L	Lec	Design and Architecture of Computer Systems	\$30.00		
162	Lab	Computer Architecture	\$30.00		
164	Lab	Computer Networks	\$30.00		
165	Lab	Computer Security	\$30.00		
166	Lab	Database Management Systems	\$30.00		

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
168	Lab	Introduction to Very Large Scale Integration (VLSI) Design	\$30.00	Electrical Engineering	168
177	Lab	Modeling and Simulation	\$30.00		
178A	Lab	Project Sequence in CSE	\$40.00		
178B	Lab	Project Sequence in CSE	\$40.00		
179 E-Z	Lab	Project in Computer Science	\$30.00		
180	Lab	Introduction to Software Engineering	\$30.00		
181	Lab	Principles of Programming Languages	\$30.00		
183	Lab	UNIX System Administration	\$30.00		
		ELECTRICAL	ENGINEERING		
030B	Lab	Fund of Elec Circuits II	\$30.00		
030LA	Lab	Fund of Elec Circuits I Lab	\$30.00		
100A	Lab	Electronic Circuits I	\$30.00		
100B	Lab	Electronic Circuits II	\$30.00		
105	Lab	Modeling and Simulation of Dynamic Systems	\$30.00		
110B	Lab	Signals and Systems	\$30.00		
115	Lab	Introduction to Communication Systems	\$30.00		
120A	Lab	Logic Design	\$30.00	Computer Sciences	120A
120B	Lab	Introduction to Embedded Systems	\$30.00	Computer Sciences	120B
123	Lab	Power Electronics	\$30.00		
128	Lab	Data Acquisition, Instrumentation, and Process Control	\$30.00		
132	Lab	Automatic Control	\$30.00		

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
135	Lab	Analog Integrated Circuit Layout and Design	\$30.00		
136	Lab	Semiconductor Device Processing	\$50.00		
141	Lab	Digital Signal Processing	\$30.00		
144	Lab	Foundations of Robotics	\$30.00	Mechanical Engineering	144
146	Lab	Computer Vision	\$30.00		
151	Lab	Introduction to Digital Control	\$30.00		
152	Lab	Image Processing	\$30.00		
153	Lab	Electric Drives	\$30.00		
161	Lab	Analytical Material Characterization	\$166.25	Materials Science and Engineering	161
165	Lab	Design for Reliability of Integrated Circuits and Systems	\$30.00		
168	Lab	Introduction to Very Large Scale Integration (VLSI) Design	\$30.00	Computer Science	168
204	Lab	Advanced Electromagnetics	\$30.00		
206	Lab	Nanoscale Characterization Techniques	\$30.00	Materials Science and Engineering	227A
229	Lab	Video Processing & Communication	\$30.00		
272	Lab	Introduction to Imaging Bioinstrumentation	\$30.00	Genetics	272
273	Lab	Live Imaging & Analysis of Cellular and Molecular Behaviors	\$30.00	Genetics	273
274	Lab	Introduction to Medical Imaging & Analysis	\$30.00	Genetics	274
275	Lab	Project in Video Bioinformatics	\$30.00		
281B	Lab	Image Processing	\$30.00		
282A	Lab	Introduction to Very Large Scale Integration (VLSI) Design	\$30.00		

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #		
282C	Lab	Analog Integrated Circuit Layout and Design	\$30.00				
282D	Lab	Design for Reliability of Integrated Circuits and Systems	\$30.00				
283A	Lab	Introduction to Robotics	\$30.00				
283B	Lab	Introduction to Digital Control	\$30.00				
284B	Lab	Computer Vision	\$30.00				
285A	Lab	Semiconductor Device Processing	\$50.00				
286B	Lab	Electric Drives	\$30.00				
286C	Lab	Power Electronics	\$30.00				
	ENGINEERING (ENGR)						
180W	Lec	Technical Communications	\$30.00				
		ENVIRONMENTA	AL ENGINEERING				
160A	Lab	Chem/Env Engineering Lab	\$86.67	Chemical Engineering	160A		
160B	Lab	Environmental Engineering Lab	\$133.33				
160C	Lab	Environmental Engineering Lab	\$50.00				
175A	Lab	Senior Design Project	\$50.00				
MATERIALS SCIENCE AND ENGINEERING							
002L	Lab	General Materials Laboratory - Spring	\$102.50				
003L	Lab	General Materials Laboratory - Fall	\$128.75				
004L	Lab	General Materials Laboratory - Winter	\$87.50				
160	Lab	Nanostructure Characterization	\$166.25				
161	Lab	Analytical Material Characterization	\$166.25	Electrical Engineering	161		

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #	
175A	Prc	Senior Design	\$166.25			
175B	Prc	Senior Design	\$166.25			
227A	Lab	Nanoscale Characterization Techniques	\$30.00	Electrical Engineering	206	
	MECHANICAL ENGINEERING					
131	Lab	Design of Mechanisms	\$30.00			
133	Lab	Introduction to Mechatronics	\$30.00			
144	Lab	Introduction to Robotics	\$30.00	Electrical Engineering	144	
156	Lab	Mechanical Behavior of Materials	\$30.00			
170A	Lab	Experimental Techniques	\$30.00			
170B	Lab	Experimental Techniques	\$30.00			
175B	Lab	Mechanical Engineering Design	\$30.00			
175C	Lab	Mechanical Engineering Design	\$30.00			
180	Lab	Optics and Lasers in Engineering	\$30.00			

GRADUATE SCHOOL OF EDUCATION (GSOE)						
COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #	
	EDUCATION					
265B	Sem	Beginning Practicum in School Psychology: Level 2	\$20.00			
265C	Sem	Intermediate Practicum in School Psychology: Level 3	\$20.00			
265D	Sem	Intermediate Practicum in School Psy: Level 1	\$20.00			
265E	Sem	Intermediate Practicum in School Psychology: Level 2	\$20.00			

COURSE #	ТҮРЕ	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
265F	Sem	Practicum in School Psy: Mental Health Intrvntn	\$20.00		
268A	Sem	Advanced Practicum in School Psy: Level 1	\$20.00		
268B	Sem	Advanced Practicum in School Psychology: Level 2	\$20.00		
268C	Sem	Advanced Practicum in School Psychology: Level 3	\$20.00		
331	Sem	Education Specialist Seminar	\$75.00		
332	Sem	Multiple Subject Seminar	\$75.00		
333	Sem	Single Subject Seminar	\$75.00		
334	Sem	Combined Credential Seminar	\$75.00		
335A	Sem	Supervsd Teaching in Special Ed	\$228.00		
337A	Fld	Teaching Performance for Multiple Subject Candidates	\$300.00		
344A	Sem	Mult Subj Credential Sem	\$228.00		
348A	Sem	Sing Subj Credential Sem	\$228.00		
377A	Fld	Teaching Performance for Single Subject Candidates	\$300.00		
381A	Sem	Education Specialist Seminr	\$304.00		
382A	Sem	Teacher Performance for Education Specialist Candidates	\$300.00		