

COURSE MATERIALS AND SERVICES FEES | FALL 2019

COLLEGE OF NATURAL & AGRICULTURAL SCIENCES (CNAS)

COURSE #	TYPE	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
BIOCHEMISTRY					
15	Lab	Intro Biochemistry Laboratory	\$80		
162	Lec	Biochemistry and Molecular Biology	\$150		
BIOLOGY					
2	Lab	Cellular Basis of Life	\$50		
3	Lab	Organisms in Their Environment	\$25		
5LA	Lab	Introduction to Cell and Molecular Biology Lab	\$50		
5B	Lab	Introduction to Organismal Biology	\$50		
5C	Lab	Introduction to Evolution and Ecology	\$15		
20	Lab	Dynamic Genome	\$50		
100	Lab	General Entomology	\$30	Entomology	100
104	Lab	Foundations of Plant Biology	\$30	Botany and Plant Sciences	104
118	Lab	Molecular Phylogenetics and Evolution	\$50		
121L	Lab	Microbiology Laboratory	\$100	Microbiology	121L
132	Lab	Plant Anatomy	\$40	Botany and Plant Sciences	132
138	Lab	Plant Development Morphology	\$30	Botany and Plant Sciences	138

143	Lab	Plant Physiology	\$50	Botany and Plant Sciences	143
151	Lab	Invertebrate Zoology	\$130		
160L	Lab	Laboratory in Animal Behavior	\$50		
161A	Lab	Functional Anatomy of the Vertebrates	\$50		
161B	Lab	Functional Anatomy of the Vertebrates	\$50		
162	Lec	Insect Behavior	\$5	Entomology	162
163	Lab	Evolutionary Ecology of Terrestrial Vertebrates	\$120		
165	Lec	Restoration Ecology	\$40	Botany and Plant Sciences	165
170	Lab	Herpetology	\$160		
171L	Lab	Human Anatomy & Physiology	\$100		
173	Lab	Insect Physiology	\$5	Entomology	173
BOTANY AND PLANT SCIENCES					
31	Lab	Spring Wildflowers	\$25		
104	Lab	Foundations of Plant Biology	\$30	Biology	104
132	Lab	Plant Anatomy	\$40	Biology	132
133	Lab	Taxonomy of Flowering Plants	\$40		
138	Lab	Plant Development Morphology	\$30	Biology	138
143	Lab	Plant Physiology	\$50	Biology	143
146	Lab	Plant Ecology	\$30		
165	Lec	Restoration Ecology	\$40	Biology	165
166	Workshop	Plant Physiological Ecology	\$30		

CELL BIOLOGY AND NEUROSCIENCE

106	Lec	Introduction to Neuroscience	\$9		
120L	Lec	Neuroscience Laboratory	\$40	Psychology	120L
124	Lec	Systems Neuroscience	\$9	Psychology	124
169	Lec	Human Embryology	\$11		

CHEMISTRY

1LA	Lab	General Chemistry	\$46		
1LB	Lab	General Chemistry	\$46		
1LC	Lab	General Chemistry	\$46		
1HLA	Lab	Honors General Chemistry	\$46		
1HLB	Lab	Honors General Chemistry	\$46		
1HLC	Lab	Honors General Chemistry	\$46		
5	Lab	Quantitative Analysis	\$46		
08LA	Lab	Organic Chemistry	\$46		
08LB	Lab	Organic Chemistry	\$46		
08LC	Lab	Organic Chemistry	\$46		
111	Lab	Physical Chemistry	\$46		
125W	Lab	Instrumental Methods	\$46		
140	Lab	Environmental Chemistry	\$46		
166	Lab	Advanced Structural and Synthetic Methods	\$46		

ENTOMOLOGY

10	Lec	Natural History of Insects	\$5		
20	Lec	Bees and Beekeeping	\$50		
100	Lab	General Entomology	\$30	Biology	100
109	Lab	Field Entomology	\$94		
114	Lab	Aquatic Insects	\$100		
124	Lab	Agricultural Entomology	\$100		
126	Lec	Medical and Veterinary Entomology	\$33		
162	Lec	Insect Behavior	\$5	Biology	162
173	Lab	Insect Physiology	\$5	Biology	173

GENETICS

272	Lab	Introduction to Imaging Bioinstrumentation	\$30	Electrical Engineering	272
273	Lab	Live Imaging & Analysis of Cellular and Molecular Behaviors	\$30	Electrical Engineering	273
274	Lab	Introduction to Medical Imaging & Analysis	\$30	Electrical Engineering	274

GEOLOGY

102B	Fld	Summer Field Geology	\$1,732.00		
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MATHEMATICS

2	Lec	Math Support Practicum	\$3		
4	Lec	Introduction to College Mathematics for Business and the Social Sciences	\$3		
5	Lec	Precalculus	\$3		
008A	Lec	Intro to Coll Math for Sciences	\$3		

008B	Lec	Intro to Coll Math for Sciences	\$6		
009A	Lec	First Year Calculus	\$6		
009B	Lec	First Year Calculus	\$6		
009C	Lec	First Year Calculus	\$6		
09HA	Lec	Honors Calculus	\$3		
09HB	Lec	Honors Calculus	\$3		
09HC	Lec	Honors Calculus	\$3		
010A	Lec	Calculus - Several Variables	\$3		
010B	Lec	Calculus - Several Variables	\$3		
11	Lec	Introduction to Discrete Structures	\$3	Computer Science	11
22	Lec	Calculus for Business	\$6		
46	Lec	Ordinary Differential Equations	\$6		
MICROBIOLOGY					
121L	Lab	Microbiology Laboratory	\$100	Biology	121L
125	Lab	Experimental Microbiology	\$50		
PHYSICS					
002A	Lec	General Physics	\$5		
002HA	Lec	Honors General Physics	\$5		
002B	Lec	General Physics	\$5		
002HB	Lec	Honors General Physics	\$5		
002C	Lec	General Physics	\$5		
002HC	Lec	Honors General Physics	\$5		

2LA	Lab	General Physics Laboratory	\$25		
02HLA	Lab	Honors General Physics Laboratory	\$25		
2LB	Lab	General Physics Laboratory	\$25		
02HLB	Lab	Honors General Physics Laboratory	\$25		
2LC	Lab	General Physics Laboratory	\$25		
02HLC	Lab	Honors General Physics Laboratory	\$25		
8	Lec	Color and Sound: Dimensions in Communication	\$5		
10	Lec	How Things Work	\$5		
16	Lec	Principles of Physics	\$5		
40A	Lab	General Physics	\$25		
040HA	Lab	Honors General Physics	\$25		
40B	Lab	General Physics	\$25		
040HB	Lab	Honors General Physics	\$25		
40C	Lab	General Physics	\$25		
040HC	Lab	Honors General Physics	\$25		
41A	Lab	Intro Physics for Physics Major	\$50		
41B	Lab	Intro Physics for Physics Major	\$50		
41C	Lab	Intro Physics for Physics Major	\$50		
139L	Lab	Electronics for Scientists	\$45		
142L	Lab	Advanced Physics Laboratory	\$150		
142W	Wrk	Advanced Physics Laboratory	\$150		

COLLEGE OF HUMANITIES, ARTS AND SOCIAL SCIENCES (CHASS)

COURSE #	TYPE	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
ART					
1	Lec	Beginning Drawing and Design	\$20		
2	Lec	Beginning Painting and Design	\$40		
3	Lec	Intro to Photo Process	\$50		
4	Lec	Introduction to Moving Images	\$60	Media & Cultural Studies	4
5	Lec	Beginning Sculpture and 3-D Design	\$85		
9	Lec	Introductory Web-Based Art: Site Creation and Navigation	\$50		
10	Stu	Intro to Video	\$45		
32	Lec	Sophomore Workshop	\$80		
65	Lec	Intro To Vector Image Making & Printing	\$65		
66	Lec	Introduction to 3-D Digital Modeling	\$40	Computer Science	66
67	Lec	Three-Dimensional Digital Modeling and Animation	\$65		67
70 E-Z	Lec	Digital Imaging Software for the Visual Arts	\$50		
71 E-Z	Lec	Photographic Materials & Processes	\$50		
75 E-Z	Wrk	Sculpture Materials & Processes	\$65		
102	Lec	Intermediate Drawing	\$20		
103	Lec	Advanced Drawing	\$20		
104	Lec	Life Drawing	\$45		
110	Lec	Intermediate Painting	\$40		

111	Lec	Advanced Painting	\$40		
112 E-Z	Wrk	Painting Materials and Processes	\$50		
115	Lec	Intermediate Sculpture	\$80		
125	Lec	Sculpture Hybrid	\$75		
131	Lec	Intermediate Photography & Digital Technology	\$75	Media & Cultural Studies	131
132	Lec	Junior Workshop	\$80		
133	Lec	Senior Art Workshop	\$80		
134	Lec	Mixed Media	\$65		
136	Lec	Installation & Site-Specific Art	\$65	Media & Cultural Studies	136
137	Lec	Advanced Sculpture	\$80		
139	Lec	Intermediate Web-Based Art	\$40		
140	Lec	Intermediate Analog Photography	\$60		
142	Lec	Color Photography	\$45		
143	Lec	Advanced Digital Imaging Technology	\$65		
145	Lec	Advanced Photography Workshop	\$60		
146 E-Z	Lec	Topics in Advanced Photography	\$60		
150	Lec	Intermediate Moving Images	\$50	Media & Cultural Studies	150
155	Lec	Advanced Moving Images	\$50	Media & Cultural Studies	155
162	Stu	New Genres of Art Practice	\$50		
165	Lec	Intermediate Vector Image Making & Printing	\$65		
167	Lec	Web Authoring	\$35		
169 E-Z	Lec	Digital Imaging Intermediate Software	\$35		

171	Lec	Intermediate & Advanced Sculpture/Digital	\$65		
175	Lec	Advanced Digital Workshop	\$65		
ART HISTORY					
136	Lec	History of Video Art	\$10	Media & Cultural Studies	137
137	Lec	History of Experimental Film	\$20	Media & Cultural Studies	138
GENDER AND SEXUALITY STUDIES					
148	Lec	INTRSCTNLTY, ECLGY, DSIGN SCI	\$917		
HIGHLANDER EARLY START ACADEMY					
1	Sem	Early Start Seminar	\$203		
MEDIA AND CULTURAL STUDIES					
4	Lec	Introduction to Moving Images	\$60	Art	4
131	Lec	Intermediate Photography & Digital Technology	\$75	Art	131
136	Lec	Installation & Site-Specific Art	\$65	Art	136
137	Lec	History of Video Art	\$10	Art History	136
138	Lec	History of Experimental Film	\$20	Art History	137
150	Lec	Intermediate Moving Images	\$50	Art	150
MUSIC					
080 (E-Z)	Stu	Private Instruction: Voice, Keyboard, and Strings	\$250		
081 (E-Z)	Stu	Private Instruction: Brass, Woodwinds, Percussion, and Other Instruments	\$250		
0180 (E-Z)	Stu	Private Instruction: Voice, Keyboard, and Strings	\$500		
0181 (E-Z)	Stu	Private Instruction: Brass, Woodwinds, Percussion, and Other Instruments	\$500		

PSYCHOLOGY

120L	Lec	Neuroscience Laboratory	\$40	Cell Biology and Neuroscience	120L
124	Lec	Systems Neuroscience	\$9	Cell Biology and Neuroscience	124

THEATRE, FILM, AND DIGITAL PRODUCTION

44	Dis	Make-Up, Theatre, Film TV	\$61		
155	Lec	Intro to Digital Film Production	\$98		
156A	Lec	Digital Film Production	\$98		
156B	Lec	Digital Film Production	\$98		
157	Lec	Introduction to Film Editing	\$71		

MARLAN AND ROSEMARY BOURNS COLLEGE OF ENGINEERING (BCOE)

COURSE #	TYPE	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
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BIOENGINEERING

10	Lec	Overview of Bioengineering	\$50		
130L	Lab	Bioinstrumentation Lab	\$50		
155	Lab	Biotechnology Lab	\$150		
175A, 175B, 175C	Lec	Senior Design	\$100		

CHEMICAL AND ENVIRONMENTAL ENGINEERING

11	Lab	Intro to Bioengineering	\$30		
125	Lab	Analys Meths For Chem & Env Engrs	\$50		

CHEMICAL ENGINEERING

124L	Lab	Biochemical Engr Lab	\$50		
160A	Lab	Chem/Env Engineering Lab	\$50	Environmental Engineering	160A
160B	Lab	Chemical Engineering Lab	\$50		
160C	Lab	Chemical Engineering Lab	\$50		
161	Lab	Nanotechnology Processing Lab	\$50		
175A	Lab	Chemical Process Design	\$50		

COMPUTER SCIENCE

5	Lab	Introduction to Computer Programming	\$30		
6	Lab	Effective Use of the World Wide Web	\$30		
8	Lab	Introduction to Computing	\$30		
10	Lab	Introduction to Computer Science for Science, Mathematics, and Engineering I	\$30		
11	Lec	Introduction to Discrete Structures	\$3	Mathematics	11
12	Lab	Introduction to Computer Science for Science, Mathematics, and Engineering II	\$30		
13	Lab	Introduction to Computer Science for Engineering Majors	\$30		
009M	Lab	Introduction to Programming	\$30		
120A	Lab	Logic Design	\$30	Electrical Engineering	120A
120B	Lab	Introduction to Embedded Systems	\$30	Electrical Engineering	120B
122A	Lab	Intermediate Embedded and Real-Time Systems	\$30		
122B	Lab	Advanced Embedded and Real-Time Systems	\$30		
130	Lab	Computer Graphics	\$30		

133	Lab	Computational Geometry	\$30		
134	Lab	Video Game and Creation and Design	\$30		
152	Lab	Compiler Design	\$30		
153	Lab	Design of Operating Systems	\$30		
160	Lab	Concurrent Programming and Parallel Systems	\$30		
161L	Lec	Design and Architecture of Computer Systems	\$30		
162	Lab	Computer Architecture	\$30		
164	Lab	Computer Networks	\$30		
165	Lab	Computer Security	\$30		
166	Lab	Database Management Systems	\$30		
168	Lab	Introduction to Very Large Scale Integration (VLSI) Design	\$30	Electrical Engineering	168
177	Lab	Modeling and Simulation	\$30		
179 E-Z	Lab	Project in Computer Science	\$30		
180	Lab	Introduction to Software Engineering	\$30		
181	Lab	Principles of Programming Languages	\$30		
183	Lab	UNIX System Administration	\$30		
ELECTRICAL ENGINEERING					
01LA	Lab	Engineering Circuit Analysis I Laboratory	\$30		
001B	Lab	Engineering Circuit Analysis II	\$30		
100A	Lab	Electronic Circuits	\$30		
100B	Lab	Electronic Circuits	\$30		
105	Lab	Modeling and Simulation of Dynamic Systems	\$30		

110B	Lab	Signals and Systems	\$30		
115	Lab	Introduction to Communication Systems	\$30		
120A	Lab	Logic Design	\$30	Computer Sciences	120A
120B	Lab	Introduction to Embedded Systems	\$30	Computer Sciences	120B
123	Lab	Power Electronics	\$30		
128	Lab	Data Acquisition, Instrumentation, and Process Control	\$30		
132	Lab	Automatic Control	\$30		
134	Lab	Digital Integrated Circuit Layout and Design	\$30		
135	Lab	Analog Integrated Circuit Layout and Design	\$30		
136	Lab	Semiconductor Device Processing	\$50		
140	Lab	Computer Visualization	\$30		
141	Lab	Digital Signal Processing	\$30		
144	Lab	Introduction to Robotics	\$30	Mechanical Engineering	144
146	Lab	Computer Vision	\$30		
151	Lab	Introduction to Digital Control	\$30		
152	Lab	Image Processing	\$30		
153	Lab	Electric Drives	\$30		
165	Lab	Design for Reliability of Integrated Circuits and Systems	\$30		
168	Lab	Introduction to Very Large Scale Integration (VLSI) Design	\$30	Computer Science	168
204	Lab	Advanced Electromagnetics	\$30		
206	Lab	Nanoscale Characterization Techniques	\$30	Materials Science and Engineering	227A
229	Lab	Video Processing & Communication	\$30		

272	Lab	Introduction to Imaging Bioinstrumentation	\$30	Genetics	272
273	Lab	Live Imaging & Analysis of Cellular and Molecular Behaviors	\$30	Genetics	273
274	Lab	Introduction to Medical Imaging & Analysis	\$30	Genetics	274
275	Lab	Project in Video Bioinformatics	\$30		
ENGINEERING (ENGR)					
180W	Lec	Technical Communications	\$30		
ENVIRONMENTAL ENGINEERING					
160A	Lab	Chem/Env Engineering Lab	\$50	Chemical Engineering	160A
160B	Lab	Environmental Engineering Lab	\$50		
160C	Lab	Environmental Engineering Lab	\$50		
175A	Lab	Senior Design Project	\$50		
MATERIAL SCIENCE AND ENGINEERING					
160	Lab	Nanostructure Characterization	\$133		
161	Lab	Nanostructure Characterization	\$133		
227A	Lab	Nanoscale Characterization Techniques	\$30	Electrical Engineering	206
MECHANICAL ENGINEERING					
131	Lab	Design of Mechanisms	\$30		
133	Lab	Introduction to Mechatronics	\$30		
144	Lab	Introduction to Robotics	\$30	Electrical Engineering	144
156	Lab	Mechanical Behavior of Materials	\$30		
170A	Lab	Experimental Techniques	\$30		
170B	Lab	Experimental Techniques	\$30		

175B	Lab	Mechanical Engineering Design	\$30		
175C	Lab	Mechanical Engineering Design	\$30		
180	Lab	Optics and Lasers in Engineering	\$30		

SCHOOL OF BUSINESS

COURSE #	TYPE	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
MANAGEMENT					
404	Lec	Com, Leadership, Teams, and Ethics	\$181		

GRADUATE SCHOOL OF EDUCATION (GSOE)

COURSE #	TYPE	COURSE TITLE	APPROVED FEE	CROSS-LISTED DEPT.	Cross-Listed Course #
EDUCATION					
265A	Sem	Practicum in School Psychology: Introductory	\$20		
265B	Sem	Practicum in School Psychology: Basic	\$20		
265C	Sem	Practicum in School Psychology: Advanced	\$20		
265D	Sem	Practicum in School Psychology: Clinical	\$20		
265E	Sem	Practicum in School Psychology: Supervision	\$20		
265F	Sem	Practicum: Mental Health Intervention	\$20		
268A	Sem	Practicum: Mental Health Intervention	\$20		
268B	Prc	Practicum: Mental Health Intervention	\$20		
268C	Prc	Practicum: Mental Health Intervention	\$20		
331	Sem	Early Supervsd Fieldwrk &Sem:ES	\$75		

332	Sem	Early Supervsd Fieldwrk &Sem:MS	\$75		
333	Sem	Early Supervsd Fieldwrk &Sem:SS	\$75		
335A	Sem	Supervsd Teaching: Special Ed	\$228		
337A		Fld Teaching Performance Assessment	\$300		
344A	Sem	Mult Subj Credential Sem	\$228		
348A	Sem	Sing Subj Credential Sem	\$228		
377A	Fld	Teaching Perf Assess Sing Subj	\$300		