# **B.A.** in Biology

(123 credit minimum)

First Year		
1st Semester		Term Credits
BIOL 200	Concepts in Biology	4
CHEM 121	Fundamentals of Chemical Principles I	3
or CHEM 125	or General Chemistry I	
MATH 138	General Calculus I	3
HUM 101	English Composition: Writing, Speaking, Thinking I	3
BNFO 135	Programming for Bioinformatics	3
FRSH SEM	Freshman Seminar	0
	Term Credits	16
2nd Semester		
R120 201	Foundations Of Biology	3
R120 202	Foundations Of Biology Lab	1
CHEM 124	General Chemistry Laboratory	1
CHEM 122 or CHEM 126	Fundamentals of Chemical Principles II or General Chemistry II	3
MATH 238	General Calculus II	3
HUM 102	English Composition: Writing, Speaking, Thinking II	3
Physical Education C	GUR Elective	1
	Term Credits	15
Second Year		
1st Semester		
BIOL 205	Foundations of Biology: Ecology and Evolution Lecture	3
BIOL 206	Foundations of Biology: Ecology and Evolution Lab	1
CHEM 243	Organic Chemistry I	3
PHYS 102	General Physics	3
PHYS 102A	General Physics Laboratory	1
MATH 105	Elementary Probability and Statistics	3
Physical Education C	GUR Elective	1
	Term Credits	15
2nd Semester		
Biology Cluster Elect	tive	3
CHEM 244	Organic Chemistry II	3
CHEM 244A	Organic Chemistry II Laboratory	2
PHYS 103	General Physics	3
PHYS 103A	General Physics Laboratory	1
English Composition	and Cultural History (lower-level) GUR Elective	3
	Term Credits	15
Third Year		
1st Semester		
Biology Functional La	aboratory Elective	4
Biology Cluster Elect		3
MGMT 390	Principles of Management	3
Social Science (lowe	er-level) GUR Elective	3
,	ial Sciences (upper-level) GUR Elective	3
	Term Credits	16
2nd Semester		
Biology Laboratory E	Elective	4
3,		•

Biology Elective	3
Technical Elective	3
Technical Elective Humanities and Social Sciences (upper-level) GUR Elective Social Science (lower-level) GUR Elective  Term Credits  Fourth Year 1st Semester Biology Laboratory Elective Biology Elective Humanities and Social Sciences (upper-level) GUR Elective Technical Elective Free Elective  Term Credits  2nd Semester Biology Elective  Technical Elective Free Elective	
Social Science (lower-level) GUR Elective	3
Term Credits	16
Fourth Year	
1st Semester	
Biology Laboratory Elective	3
Biology Elective	3
Humanities and Social Sciences (upper-level) GUR Elective	3
Technical Elective	3
Free Elective	3
Term Credits	15
2nd Semester	
Biology Elective	3
Technical Elective	3
Free Elective	3
Free Elective	3
Free Elective	3
Term Credits	15
Total Credits	123

Biology Credits: 38 (Including General Biology I, II, and Foundations of Biology)

Genetics

Cell Biology

#### **Technical Electives**

Any course in chemistry, math or physics beyond major requirements. Any course in environmental science, computer science or engineering. Additional biology courses can be used as technical electives.

#### **Free Electives**

R120 352

R120 355

Any course in any subject at any level.

### **Biology Electives**

One course must be taken from each cluster.

#### Cluster A – Ecology and Evolution

BIOL 222	Evolution	3
R120 280	Ecology	3
R120 382	Animal Behavior	3
R120 370	Plant Ecology	3
Cluster B – Functional	Organism	
R120 211	Plant Kingdom	4
R120 230	Biology Of Seed Plants	4
R120 330	Plant Physiology	4
R120 335	General Microbiology	4
R120 340	Mammalian Physiology	4
or BIOL 340	Mammalian Physiology	
R120 342 & R120 343	Developmental Biology and Developmental Biology Lab	4
Cluster C – Molecular and Cellular		

3

3

R120 356	Molecular Biology	3
R120 360	Biochemistry	3
or CHEM 473	Biochemistry	

## Laboratory Experience Courses (At least two 4 credit labs are required)

Four	Credit	Laboratory	Courses
roui	Credit	Laboratory	Courses

Any course from Functional Organism	n Cluster	4
R120 227	Biol Invertebrates	4
R120 285	Comparative Vertebrate Anatomy	4
R120 311	Flora of New Jersey	4
R120 313	Mycology	4
R120 325 & R120 326	Animal Parasites and Parasitology Lab	4
R120 405	Microanatomy of Cells	4
R120 430	Plant Growth & Development	4
BIOL 451	Cell Physiology and Imaging	4
R120 452	Molecular Biol Techniques	4
R120 481	Marine Biology	4
Three Credit Laboratory Courses		
R120 328	Ornithology	3
R120 371	Field Study Plant Ecology	3
R120 381	Ecological History of North Am	3
R120 380	Field Ecology	3
BIOL 385	Evolution of Animal Behavior Laboratory	3
BIOL 475	Ecological Field Methods and Analysis	3
R120 486	Tropical Field Biology	2

## **Biology Electives**

Insects and Human Society	3
Principles of Neurobiology	3
Discovering Biological Research	3
Collective Intel in Biol Syst	3
Ecology of the Dining Hall	3
Introduction to Neurophysiology	3
Physiological Mechanisms	3
Comparative Physiology	3
Neurobiology	3
Neurobiology	
Immunology	3
Evolutions of Humans	3
The Ecology and Evolution of Disease	3
Physiology and Medicine	3
Population Biology	3
Introduction to Mathematical Biology	3
Conservation Biology	3
Neural Basis of Behavior	3
Visualizing Biology	3
Biology in Science Fiction	3
Biological Ultrastructure	3
Intro to Neuroanatomy	4
Plant Evolution	3
Biological Invasions	3
	Principles of Neurobiology  Discovering Biological Research  Collective Intel in Biol Syst  Ecology of the Dining Hall Introduction to Neurophysiology Physiological Mechanisms  Comparative Physiology Neurobiology Neurobiology Neurobiology Immunology  Evolutions of Humans  The Ecology and Evolution of Disease Physiology and Medicine Population Biology Introduction to Mathematical Biology Conservation Biology Neural Basis of Behavior Visualizing Biology Biology in Science Fiction Biological Ultrastructure Intro to Neuroanatomy Plant Evolution

MATH 430			
BIOL. 440	MATH 430	Analytical and Computational Neuroscience	3
R1201444	R120 431	Modern Plant Biology	3
BIOL 445   Endocrinology   3   3   3   3   3   3   3   3   3	BIOL 440	Cell Biology of Disease: Cells gone Bad!	3
BIOL. 447   Systems Neurobiology   3   3   3   3   3   3   3   3   3	R120 444	Cell Neurobiology	3
BIOL 448	BIOL 445	Endocrinology	3
R120 455   Molec Cell Biology   3   3   1   1   1   1   1   1   1   1	BIOL 447	Systems Neurobiology	3
BIOL 462   Comparative Biomechanics   3   R120 471   Ecological Physiology   3   3   R120 487   Syst Ecolif.Coxys in Landscape   3   3   3   3   3   3   3   3   3	BIOL 448	Neuropathophysiology: Nervous System Gone Bad!	3
R120 471	R120 455	Molec Cell Biology	3
R1204 487	BIOL 462	Comparative Biomechanics	3
BIOL 491   Research and Independent Study   and Research and Independent Study   3   3   4   4   4   4   4   4   4   4	R120 471	Ecological Physiology	3
BIOL 492 and Research and Independent Study BIOL 495 Noro's Seminar in Biology  Ceneral University Requirements and Electives  Computer Science BINFO 135 Programming for Bioinformatics 3  Management  E 492 Engineering Management or MGMT 390 Principles of Management 9  Physical Education 1  PE 1XX Physical Education course 1  Physical Education course 1  Social Science (lower-level)  Select two of the following: 6  ECON 266 Macroeconomics  ECON 266 Macroeconomics  ECON 268 Macroeconomics  EPS 202 Society, Technology, and the Environment 5  STS 257 Technology, Society and Culture: An American View 5  STS 258 Technology, Society and Culture: An American View 7  STS 258 Technology, Society and Culture: A Global View Approved introductory courses in basic social sciences at Rutgers-Newark English Composition: Writing, Speaking, Thinking I 3  HUM 101 English Composition: Writing, Speaking, Thinking I 3  Select one of the following: 7  HUM 211 The Pre-Modern World HIST 213 The Modern World HIST 213 The Modern World HIST 213 The Modern World HIST 213 The Twentieth-Century World HIST 213 The Twentieth-Century World HIST 213 The Modern World HIST 213 The Modern World HIST 213 The Twentieth-Century World HIST 213 The Twentieth-Century World HIST 213 The Modern World HIST 213 The Modern World HIST 213 The Twentieth-Century World HIST	R120 487	Syst Ecol:Ecosys in Landscape	3
BIOL 495 Honors Seminar in Biology  Ceneral University Requirements and Electives  Computer Science BINFO 135 Programming for Bioinformatics 3 BINFO 135 Programming for Bioinformatics 3 Tensphere	BIOL 491		6
Computer Science BNFO 135 Programming for Bioinformatics 3 Management  E 492 Engineering Management 3 or MGMT 390 Principles of Management 4 Physical Education 1 Physical Education 5 E 14XX Physical Education course 1 Physical Education Course 2 Physical	& BIOL 492	and Research and Independent Study	
Computer Science           BNFO 135         Programming for Bioinformatics         3           Management         1           E492         Engineering Management         3           or MGMT 390         Principles of Management         5           Physical Education           FE 1XX         Physical Education course         1           Social Science (lower-levely)         1           Select two of the following:	BIOL 495	Honors Seminar in Biology	3
BNFO 135         Programming for Bioinformatics         3           Management           E 492         Engineering Management           Principles of Management           Physical Education **           Physical Education course         1           Social Science (lower-level)         1           Social Science (lower-level)         5           ECON 266         Microeconomics           ECON 266         Macroeconomics           EPS 202         Society and Culture: An American View           STS 257         Technology, Society and Culture: A Global View           Approved introductory courses in basic social sciences at Rutgers-Newark           Full M 102         English Composition: Writing, Speaking, Thinking I         3           HUM 101         English Composition: Writing, Speaking, Thinking II         3           HUM 212         The Modern World           HUM 212         The Modern World           HUM 212         The Fwentiteth-Century World           HIST 2X <td>General Universi</td> <td>ty Requirements and Electives</td> <td></td>	General Universi	ty Requirements and Electives	
Management           IE 492         Engineering Management           or MGMT 390         Principles of Management           Physical Education         1           PE 1XX         Physical Education course         1           Physical Education course         1           Social Science (lower-level)         6           Select two of the following:         6           ECON 265         Microeconomics           ECON 266         Macroeconomics           EPS 202         Society, Technology, Society and Culture: An American View           STS 257         Technology, Society and Culture: A Global View           Approved introductory courses in basic social sciences at Rutgers-Newark           English Composition and Cultural History (lower-level)           HUM 101         English Composition: Writing, Speaking, Thinking I         3           HUM 102         English Composition: Writing, Speaking, Thinking I         3           HUM 211         The Pre-Modern World         4           HUS 213         The Twentieth-Centruy World         4           HIST 213         The Twentieth-Centruy World         4           HIST 224         History course at Rutgers-Newark         4           Humarities and Social Sciences (upper-level)         5	Computer Science		
IE 492         Engineering Management           or MGMT 390         Principles of Management           Physical Education ¹           PE 1XX         Physical Education course         1           Social Science (lower-level)           Social Science (lower-level)           Select two of the following:	BNFO 135	Programming for Bioinformatics	3
or MGMT 390         Principles of Management           Physical Education 1           PE 1XX         Physical Education course         1           Social Science (lower-level)           Select two of the following:         6           ECON 265         Microeconomics           ECON 266         Macroeconomics           EPS 202         Society, Technology, and the Environment           STS 257         Technology, Society and Culture: An American View           STS 258         Technology, Society and Culture: A Isobal View           Approved introductory courses in basic social sciences at Rutgers-Newark           English Composition: Writing, Speaking, Thinking I         3           HUM 101         English Composition: Writing, Speaking, Thinking II         3           Select one of the following:         1           HUM 211         The Pre-Modern World           HUM 212         The Modern World           HUST 213         The Twentieth-Century World           HIST 2XX         History course at Rutgers-Newark           Humanities and Social Sciences (upper-level)           Select one of the following 300-level courses:         3           3XX         Philosophy course           3XX         Science, Technology and Society	Management		
Physical Education 1           PE 1XX         Physical Education course         1           Physical Education course         1           Social Science (lower-level)           Select two of the following:         6           ECON 265         Microeconomics           ECON 265         Macroeconomics           EPS 202         Society, Technology, and the Environment           STS 267         Technology, Society and Culture: An American View           STS 258         Technology, Society and Culture: A Global View           Approved introductory courses in basic social sciences at Rutgers-Newark           English Composition and Cultural History (lower-level)           HUM 101         English Composition: Writing, Speaking, Thinking I         3           HUM 102         English Composition: Writing, Speaking, Thinking II         3           Select one of the following:         3           HUM 211         The Pre-Modern World         4           HUM 212         The Modern World         4           HUST 213         The Twentieth-Century World         4           HIST 2XX         History course at Rutgers-Newark         3           Aux A Philosophy course           3XX         Literature course	IE 492	Engineering Management	3
PE 1XX         Physical Education course         1           Social Science (lower-level)           Select two of the following:         6           ECON 265         Microeconomics           ECON 266         Macroeconomics           EPS 202         Society, Technology, and the Environment           STS 257         Technology, Society and Culture: A Global View           Approved introductory courses in basic social sciences at Rutgers-Newark           English Composition: Writing, Speaking, Thinking I           HUM 101         English Composition: Writing, Speaking, Thinking II         3           Select one of the following:         a           HUM 211         The Pre-Modern World           HUS 213         The Twentieth-Century World           HIST 2XX         History course at Rutgers-Newark           Humanities and Social Sciences (upper-level)           Select one of the following 300-level courses:         3           3XX         History course         3           3XX         Philosophy course         3           3XX         Philosophy course         3           3XX         Science, Technology and Society course         3           3XX         Approved 300-level course at Rutgers-Newark	or MGMT 390	Principles of Management	
PE 1XX         Physical Education course         1           Social Science (lower-level)           Select two of the following:         6           ECON 265         Microeconomics           ECON 266         Macroeconomics           EPS 202         Society, Technology, and the Environment           STS 257         Technology, Society and Culture: A Global View           Approved introductory courses in basic social sciences at Rutgers-Newark           English Composition: Writing, Speaking, Thinking I           HUM 101         English Composition: Writing, Speaking, Thinking II         3           Select one of the following:         a           HUM 211         The Pre-Modern World           HUS 213         The Twentieth-Century World           HIST 2XX         History course at Rutgers-Newark           Humanities and Social Sciences (upper-level)           Select one of the following 300-level courses:         3           3XX         History course         3           3XX         Philosophy course         3           3XX         Philosophy course         3           3XX         Science, Technology and Society course         3           3XX         Approved 300-level course at Rutgers-Newark	Physical Education <sup>1</sup>	· · · · · ·	
Social Science (lower-level)           Select two of the following:         6           ECON 265         Microeconomics           ECON 266         Macroeconomics           EPS 202         Society, Technology, and the Environment           STS 257         Technology, Society and Culture: An American View           STS 258         Technology, Society and Culture: A Global View           Approved introductory courses in basic social sciences at Rutgers-Newark           English Composition and Cultural History (lower-level)           HUM 101         English Composition: Writing, Speaking, Thinking I         3           HUM 102         English Composition: Writing, Speaking, Thinking II         3           Select one of the following:         3           HUM 211         The Pre-Modern World         4           HUM 212         The Modern World         4           HIST 2XX         History course at Rutgers-Newark         4           Humanities and Social Sciences (upper-level)         5           Select one of the following 300-level courses:         3           3XX         History course         3           3XX         Philosophy course           3XX         Science, Technology and Society course           3XX         Approved 300-level course at Rutgers-Newar		Physical Education course	1
Select two of the following:  ECON 265 Microeconomics  ECON 266 Macroeconomics  EPS 202 Society, Technology, and the Environment  STS 257 Technology, Society and Culture: An American View  STS 258 Technology, Society and Culture: A Global View Approved introductory courses in basic social sciences at Rutgers-Newark  English Composition and Cultural History (lower-level)  HUM 101 English Composition: Writing, Speaking, Thinking II  Select one of the following:  AUM 102 English Composition: Writing, Speaking, Thinking II  Bright 211 The Pre-Modern World  HUM 212 The Modern World  HUST 213 The Twentieth-Century World  HIST 213 The Twentieth-Century World  HIST 21X History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3XX Literature course  3XX Philosophy course  3XX Philosophy course  3XX Science, Technology and Society course  3XX Science, Technology and Society course  3XX Science, Technology and Society course  Select one of the following 300-level courses at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3XX A paproved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3XX English course  3XX English course	Physical Education course		1
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STS 257 Technology, Society and Culture: An American View STS 258 Technology, Society and Culture: A Global View Approved introductory courses in basic social sciences at Rutgers-Newark  English Composition and Cultural History (lower-level)  HUM 101 English Composition: Writing, Speaking, Thinking I  HUM 102 English Composition: Writing, Speaking, Thinking II  Select one of the following:  3 HUM 211 The Pre-Modern World  HUM 212 The Modern World  HIST 213 The Twentieth-Century World  HIST 213 The Twentieth-Century World  HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level) Select one of the following 300-level courses:  3 XX History course  3XX Philosophy course  3XX Science, Technology and Society course  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3 XX English course  3 XX English course  3 XX English course	ECON 266	Macroeconomics	
STS 258 Technology, Society and Culture: A Global View Approved introductory courses in basic social sciences at Rutgers-Newark  English Composition and Cultural History (lower-level)  HUM 101 English Composition: Writing, Speaking, Thinking I  3 HUM 102 English Composition: Writing, Speaking, Thinking II  3 Select one of the following:  3 HUM 211 The Pre-Modern World  HUM 212 The Modern World  HIST 213 The Twentieth-Century World  HIST 213 The Twentieth-Century World  HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3 XX Literature course  3XX Literature course  3XX Philosophy course  3XX Science, Technology and Society course  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3 XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3 XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3 XX English course  3 XX English course	EPS 202	Society, Technology, and the Environment	
Approved introductory courses in basic social sciences at Rutgers-Newark  English Composition and Cultural History (lower-level)  HUM 101 English Composition: Writing, Speaking, Thinking I 3  HUM 102 English Composition: Writing, Speaking, Thinking II 3  Select one of the following: 3  HUM 211 The Pre-Modern World HUM 212 The Modern World HIST 213 The Twentieth-Century World HIST 21X History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX Literature course 3XX History course 3XX Philosophy course 3XX Philosophy course 3XX Science, Technology and Society course 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX English course 3XX English course	STS 257	Technology, Society and Culture: An American View	
English Composition and Cultural History (lower-level)  HUM 101 English Composition: Writing, Speaking, Thinking I 3  HUM 102 English Composition: Writing, Speaking, Thinking II 3  Select one of the following: 3  HUM 211 The Pre-Modern World  HUM 212 The Modern World  HIST 213 The Twentieth-Century World  HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX Literature course  3XX Philosophy course  3XX Philosophy course  3XX Science, Technology and Society course  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX English course  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX English course	STS 258	Technology, Society and Culture: A Global View	
HUM 101 English Composition: Writing, Speaking, Thinking I 3 HUM 102 English Composition: Writing, Speaking, Thinking II 3 Select one of the following: 3 HUM 211 The Pre-Modern World HUM 212 The Modern World HIST 213 The Twentieth-Century World HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level) Select one of the following 300-level courses: 3 3XX Literature course 3XX History course 3XX Philosophy course 3XX Philosophy course 3XX Science, Technology and Society course 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level) Select one of the following 300-level courses: 3 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level) Select one of the following 300-level courses: 3 3XX English course 3XX History course	Approved introductory cou	urses in basic social sciences at Rutgers-Newark	
HUM 102 English Composition: Writing, Speaking, Thinking II 3  Select one of the following: 3  HUM 211 The Pre-Modern World  HUM 212 The Modern World  HIST 213 The Twentieth-Century World  HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX Literature course 3XX History course 3XX Philosophy course 3XX Philosophy course 3XX Science, Technology and Society course 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX English course 3XX English course	<b>English Composition and C</b>	Cultural History (lower-level)	
Select one of the following:  HUM 211 The Pre-Modern World  HUM 212 The Modern World  HIST 213 The Twentieth-Century World  HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3XX Literature course  3XX History course 3XX Philosophy course 3XX Philosophy course 3XX Science, Technology and Society course 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3XX English course 3XX English course 3XX English course	HUM 101	English Composition: Writing, Speaking, Thinking I	3
HUM 211 The Pre-Modern World HUM 212 The Modern World HIST 213 The Twentieth-Century World HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3 3XX Literature course 3XX History course 3XX Philosophy course 3XX Science, Technology and Society course 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3 3XX English course 3XX History course	HUM 102	English Composition: Writing, Speaking, Thinking II	3
HUM 212 The Modern World  HIST 213 The Twentieth-Century World  HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX Literature course 3XX History course  3XX Philosophy course 3XX Philosophy course 3XX Science, Technology and Society course 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX English course 3XX History course	Select one of the following:		3
HIST 213 The Twentieth-Century World HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3 3XX Literature course 3XX History course 3XX Philosophy course 3XX Philosophy course 3XX Science, Technology and Society course 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3 3XX English course 3XX History course	HUM 211	The Pre-Modern World	
HIST 2XX History course at Rutgers-Newark  Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX Literature course  3XX History course  3XX Philosophy course  3XX Science, Technology and Society course  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX English course  History course	HUM 212	The Modern World	
Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX Literature course  3XX History course  3XX Philosophy course  3XX Science, Technology and Society course  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3  3XX English course  History course	HIST 213	The Twentieth-Century World	
Select one of the following 300-level courses:  3XX Literature course  3XX History course  3XX Philosophy course  3XX Science, Technology and Society course  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3XX English course  3XX History course	HIST 2XX	History course at Rutgers-Newark	
3XX Literature course  3XX History course  3XX Philosophy course  3XX Science, Technology and Society course  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3XX English course  3XX History course	<b>Humanities and Social Scie</b>	ences (upper-level)	
3XX Philosophy course 3XX Science, Technology and Society course 3XX Science, Technology and Society course 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3XX English course 3XX History course	Select one of the following 30	00-level courses:	3
3XX Philosophy course 3XX Science, Technology and Society course 3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses: 3XX English course 3XX History course	3XX	Literature course	
3XX Science, Technology and Society course  3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3XX English course  3XX History course	3XX	History course	
3XX Approved 300-level course at Rutgers-Newark  Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3XX English course  3XX History course	3XX	Philosophy course	
Open Elective in Humanities and Social Sciences (upper-level)  Select one of the following 300-level courses:  3XX English course  3XX History course	3XX	Science, Technology and Society course	
Select one of the following 300-level courses:  3XX English course  3XX History course	3XX	Approved 300-level course at Rutgers-Newark	
3XX English course 3XX History course	Open Elective in Humanitie	es and Social Sciences (upper-level)	
3XX History course	Select one of the following 30	00-level courses:	3
· · · · · · · · · · · · · · · · · · ·	3XX	English course	
3XX Literature course	3XX	History course	
	3XX	Literature course	

3XX	Philosophy course	
3XX	Science, Technology and Society course	
3XX	Social Science course	
3XX	Theatre course	
ARCH 382		
3XX	Approved 300-level course at Rutgers-Newark	
Senior Seminar in Hur	manities and Social Sciences (upper-level)	
Select one of the follow	ing. Honors College students register for honors section.	3
HSS 403	Humanities Senior Seminar - Literature	
HSS 404	Humanities Senior Seminar - History	
HSS 405	Humanities Senior Seminar - Philosophy	
HSS 406	Humanities Senior Seminar - English	
HSS 407	Humanities Senior Seminar - Theater	
HSS 408	Humanities Senior Seminar - Science, Technology, and Society	
HSS 409	Humanities Senior Seminar - Social Science	

Students who register as full-time undergraduates for two or more consecutive semesters must take two PE courses. Students are urged to complete the requirement as soon as possible.