Complex Network Analysis, MS (Boston)

Complex network analysis is the quantitative study of interconnected systems that influence every aspect of our lives—from where we get our news and who we share ideas with, to how we travel and the people we interact with, to the products we purchase and the foods we eat. Networks are ubiquitous across natural and human-made systems, and their structure and dynamics can explain and help improve the greatest challenges of the next century such as pandemics, food scarcity, cultural polarization, and climate change. Expertise in the emerging field of complex network analysis, within the landscape of the rapid growth of artificial intelligence and machine learning, forms the foundation of the next generation of thought leaders. Northeastern University leads the way in this burgeoning field, offering a unique master's degree program in complex network analysis methodologies. The program is designed to equip students with the conceptual and analytical tools needed to find patterns of connections in networked systems and apply these techniques in real-world settings. The curriculum includes industry-aligned concentration areas of focus, enabling graduates to apply complex network analysis skills in impactful careers in the public and private sectors as well as in research. The concentrations for this program correspond directly to the following industry sectors:

- 1. Public health and life sciences fields such as epidemiological modeling, public policy, and behavioral research
- 2. Social or urban science and research fields such as urban planning, social network research, economics, education, criminal science, or public policy
- 3. Finance or technological fields such as financial analytics, market research, or network analysis for business
- 4. Biological systems modeling used across research and industry including network biology, drug discovery, or multi-omics mining

In this degree program, students are admitted to the college associated with their concentration, and their degree is awarded by that college. The concentrations are associated with the following colleges:

- Complex Biological Networks-College of Science
- Complex Social Systems-College of Social Sciences and Humanities
- · Economic and Technological Networks-Khoury College of Computer Sciences
- · Population Health Dynamics-Bouvé College of Health Sciences

Students will follow all policies associated with their home college.

Program Requirements

Complete all courses and requirements listed below unless otherwise indicated.

Required Courses

Code	Title	Hours
CNET 5050	Fundamentals of Complex Networks	4
CNET 5051	Analyzing Complex Network Data	4
CNET 5052	Advanced Tools for Complex Network Analysis	4
CNET 5901	Visualizing Complex Networks	2
CNET 5902	Communicating Network Data	2

Concentrations

Complete one of the following concentrations:

- Complex Biological Networks (p. 2)-College of Science
- · Complex Social Systems (p. 2)-College of Social Sciences and Humanities
- Economic and Technological Networks (p. 3)-Khoury College of Computer Sciences
- · Population Health Dynamics (p. 3)-Bouvé College of Health Sciences

Experiential Courses

(Code	Title	Hours
(Complete a total of 4 semester hours from t	ne following (course may be repeated):	4
	CNET 6107	Complex Network Analysis Research Rotation	
	CNET 6108	Complex Network Analysis Capstone	
	CNET 6990	Thesis	

2 Complex Network Analysis, MS (Boston)

Optional Co-op

Code	Title	Hours
CNET 6000	Professional Development for Co-op	1
CNET 6964	Co-op Work Experience	0

Program Credit/GPA Requirements

Minimum 33 total semester hours required Additional hours may be required based on student choice of courses or concentration. One semester hour of additional coursework is required for participation in co-op.

Minimum 3.000 GPA required

CONCENTRATION IN COMPLEX BI	ULUGICAL NETWORKS-CULLEGE OF SCIENCE	
Code	Title	Hours
A minimum of 16 semester hour	s is required to complete this concentration.	
Required		
CNET 5515	Complex Network Analysis for Biological Systems	4
Complete 8 semester hours from	the following:	8
BINF 6308	Bioinformatics Computational Methods 1	
BINF 6310	Introduction to Bioinformatics	
EEMB 5130	Population Dynamics	
ENVR 5450	Applied Social-Ecological Systems Modeling	
MATH 5131	Introduction to Mathematical Methods and Modeling	
MATH 7340	Statistics for Bioinformatics	
PHYS 5211	Introduction to Scientific Computing	
Complete 4 semester hours from College of Health Sciences conc	the following (students may opt to take the required course in the College of Science or Bouvé entrations for this section):	4
CNET 5126	Spreading on Networks: From Epidemics to Memes	
CNET 5314	Complexity in Social Systems	
CNET 5411	Financial and Economic Networks	
CNET 6061	Analyzing Higher-Order Networks	
CNET 6063	Probabilistic Mathematics of Networks	
CNET 6000	Special Tanica in Complex Naturaly	
CINET 0099	Special ropics in complex Networks	
CONCENTRATION IN COMPLEX SC	CIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES	Hours
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hour.	CIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title	Hours
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hour: Required	CIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration.	Hours
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hour Required CNET 5314	DCIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration.	Hours
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hour Required CNET 5314 Complete a minimum of 6 semes	DCIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following:	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hour: Required CNET 5314 Complete a minimum of 6 semes CNET 5311	Complexity in Social Systems Complexity in Social Systems Ster hours from the following: Physical and Digital Human Traces	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hour Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360	Complexity in Social Systems Complexity in Social Systems Ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301	Complexity in Social Systems Complexity in Social Systems Ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301 INSH 6101	CIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics Agent-Based Modeling for Applied and Social Sciences	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301 INSH 6101 INSH 6300	CIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics Agent-Based Modeling for Applied and Social Sciences Research Methods in the Social Sciences	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301 INSH 6101 INSH 6300 INSH 6304	Special ropids in complex Networks DCIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics Agent-Based Modeling for Applied and Social Sciences Research Methods in the Social Sciences Modeling and Analyzing Social Networks	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301 INSH 6101 INSH 6100 INSH 6300 INSH 6304 INSH 6406	Special ropids in complex Networks OCIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics Agent-Based Modeling for Applied and Social Sciences Research Methods in the Social Sciences Modeling and Analyzing Social Networks Analyzing Complex Digitized Data	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301 INSH 6101 INSH 6101 INSH 6300 INSH 6304 INSH 6406 INSH 6500	Special ropids in complex Networks DCIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics Agent-Based Modeling for Applied and Social Sciences Research Methods in the Social Sciences Modeling and Analyzing Social Networks Analyzing Complex Digitized Data Statistical Analysis	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301 INSH 6101 INSH 6101 INSH 6300 INSH 6304 INSH 6406 INSH 6500 PHYS 5211	Special ropids in complex Networks CIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics Agent-Based Modeling for Applied and Social Sciences Research Methods in the Social Sciences Modeling and Analyzing Social Networks Analyzing Complex Digitized Data Statistical Analysis Introduction to Scientific Computing	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301 INSH 6101 INSH 6101 INSH 6300 INSH 6304 INSH 6406 INSH 6500 PHYS 5211 PPUA 5262	Special ropics in complex Networks COLAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics Agent-Based Modeling for Applied and Social Sciences Research Methods in the Social Sciences Modeling and Analyzing Social Networks Analyzing Complex Digitized Data Statistical Analysis Introduction to Scientific Computing Big Data for Cities	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301 INSH 6101 INSH 6101 INSH 6300 INSH 6304 INSH 6406 INSH 6500 PHYS 5211 PPUA 5262 PPUA 7237	Special ropids in complex Networks COLAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics Agent-Based Modeling for Applied and Social Sciences Research Methods in the Social Sciences Modeling and Analyzing Social Networks Analyzing Complex Digitized Data Statistical Analysis Introduction to Scientific Computing Big Data for Cities Advanced Spatial Analysis of Urban Systems	Hours 3 6
CONCENTRATION IN COMPLEX SC Code A minimum of 13 semester hours Required CNET 5314 Complete a minimum of 6 semes CNET 5311 CNET 5360 INSH 5301 INSH 6101 INSH 6101 INSH 6300 INSH 6304 INSH 6304 INSH 6406 INSH 6500 PHYS 5211 PPUA 5262 PPUA 7237 Complete a minimum of 4 semes Science or Bouvé College of Hea	Special ropics in complex Networks CIAL SYSTEMS-COLLEGE OF SOCIAL SCIENCES AND HUMANITIES Title s is required to complete this concentration. Complexity in Social Systems ster hours from the following: Physical and Digital Human Traces Research Design for Social Networks Introduction to Computational Statistics Agent-Based Modeling for Applied and Social Sciences Research Methods in the Social Sciences Modeling and Analyzing Social Networks Analyzing Complex Digitized Data Statistical Analysis Introduction to Scientific Computing Big Data for Cities Advanced Spatial Analysis of Urban Systems ster hours from the following (students may opt to take the required course in the College of Ith Sciences concentrations for this section):	Hours 3 6

CNET 5411	Financial and Economic Networks	
CNET 5515	Complex Network Analysis for Biological Systems	
CNET 6061	Analyzing Higher-Order Networks	
CNET 6063	Probabilistic Mathematics of Networks	
CNET 6099	Special Topics in Complex Networks	
CONCENTRATION IN ECONOMIC AI	ND TECHNOLOGICAL NETWORKS—KHOURY COLLEGE OF COMPUTER SCIENCES	
Code	Title	Hours
A minimum of 14 semester hours	is required to complete this concentration.	
Required		
CNET 5411	Financial and Economic Networks	3
Complete a minimum of 7 semes	ter hours from the following:	7
CS 7150	Deep Learning	
CS 7200	Statistical Methods for Computer Science	
DS 5220	Supervised Machine Learning and Learning Theory	
DS 5230	Unsupervised Machine Learning and Data Mining	
MISM 6212	Data Mining and Machine Learning for Business	
PHYS 5211	Introduction to Scientific Computing	
Complete a minimum of 4 semes Science or Bouvé College of Heal	ter hours from the following (students may opt to take the required course in the College of the Sciences concentrations for this section):	4
CNET 5126	Spreading on Networks: From Epidemics to Memes	
CNET 5314	Complexity in Social Systems	
CNET 5515	Complex Network Analysis for Biological Systems	
CNET 6061	Analyzing Higher-Order Networks	
CNET 6063	Probabilistic Mathematics of Networks	
0.12. 0000		
CNET 6099	Special Topics in Complex Networks	
CNET 6099	Special Topics in Complex Networks	
CNET 6099	Special Topics in Complex Networks	
CNET 6099 CONCENTRATION IN POPULATION Code	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title	Hours
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration.	Hours
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required	Special Topics in Complex Networks HEALTH DYNAMICS – BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration.	Hours
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes	Hours
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semes:	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following:	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semes BINF 6308	Special Topics in Complex Networks HEALTH DYNAMICS – BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semes BINF 6308 PHTH 5210 PHTH 6210	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Annlied Begression Analysis	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semes BINF 6308 PHTH 5210 PHTH 6210 PHTH 6224	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210 PHTH 6210 PHTH 6224 PHTH 6440	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semes BINF 6308 PHTH 5210 PHTH 6210 PHTH 6224 PHTH 6440 PHTH 6400 PHTH 6800	Special Topics in Complex Networks HEALTH DYNAMICS - BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Besearch	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semes BINF 6308 PHTH 5210 PHTH 6210 PHTH 6224 PHTH 6440 PHTH 6400 PHTH 6800 PHTH 6801	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Research Causal Inference 1	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210 PHTH 6210 PHTH 6210 PHTH 6224 PHTH 6440 PHTH 6800 PHTH 6801 PHYS 5211	Special Topics in Complex Networks HEALTH DYNAMICS-BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Research Causal Inference 1 Introduction to Scientific Computing	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210 PHTH 6210 PHTH 6210 PHTH 6224 PHTH 6440 PHTH 6800 PHTH 6801 PHYS 5211 Complete a minimum of 4 semest	Special Topics in Complex Networks HEALTH DYNAMICS - BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Research Causal Inference 1 Introduction to Scientific Computing	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210 PHTH 6210 PHTH 6224 PHTH 6224 PHTH 6440 PHTH 6801 PHTH 6801 PHYS 5211 Complete a minimum of 4 semest Science or Bouvé College of Healt	Special Topics in Complex Networks HEALTH DYNAMICS – BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Research Causal Inference 1 Introduction to Scientific Computing ter hours from the following (students may opt to take the required course in the College of the Sciences concentrations for this section):	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210 PHTH 6210 PHTH 6224 PHTH 6224 PHTH 6440 PHTH 6800 PHTH 6800 PHTH 6801 PHYS 5211 Complete a minimum of 4 semest Science or Bouvé College of Healt CNET 5314	Special Topics in Complex Networks HEALTH DYNAMICS - BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Research Causal Inference 1 Introduction to Scientific Computing ter hours from the following (students may opt to take the required course in the College of the Sciences concentrations for this section): Complexity in Social Systems	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210 PHTH 6210 PHTH 6210 PHTH 6224 PHTH 6224 PHTH 6440 PHTH 6800 PHTH 6801 PHYS 5211 Complete a minimum of 4 semest Science or Bouvé College of Healt CNET 5314 CNET 5411	Special Topics in Complex Networks HEALTH DYNAMICS - BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Research Causal Inference 1 Introduction to Scientific Computing ter hours from the following (students may opt to take the required course in the College of th Sciences concentrations for this section): Complexity in Social Systems Financial and Economic Networks	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210 PHTH 6210 PHTH 6210 PHTH 6224 PHTH 6440 PHTH 6440 PHTH 6800 PHTH 6801 PHYS 5211 Complete a minimum of 4 semest Science or Bouvé College of Healt CNET 5314 CNET 5411 CNET 5515	Special Topics in Complex Networks HEALTH DYNAMICS - BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Research Causal Inference 1 Introduction to Scientific Computing ter hours from the following (students may opt to take the required course in the College of the Sciences concentrations for this section): Complexity in Social Systems Financial and Economic Networks Complex Network Analysis for Biological Systems	Hours 4 6
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210 PHTH 6210 PHTH 6210 PHTH 6224 PHTH 6440 PHTH 6440 PHTH 6800 PHTH 6801 PHYS 5211 Complete a minimum of 4 semest Science or Bouvé College of Healt CNET 5314 CNET 5515 CNET 6061	Special Topics in Complex Networks HEALTH DYNAMICS - BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. Spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Research Causal Inference 1 Introduction to Scientific Computing ter hours from the following (students may opt to take the required course in the College of the Science's concentrations for this section): Complexity in Social Systems Financial and Economic Networks Complex Network Analysis for Biological Systems Analyzing Higher-Order Networks	Hours 4 6 4
CNET 6099 CONCENTRATION IN POPULATION Code A minimum of 14 semester hours Required CNET 5126 Complete a minimum of 6 semest BINF 6308 PHTH 5210 PHTH 6210 PHTH 6210 PHTH 6224 PHTH 6224 PHTH 6440 PHTH 6801 PHYS 5211 Complete a minimum of 4 semest Science or Bouvé College of Healt CNET 5314 CNET 5314 CNET 5515 CNET 6061 CNET 6063	Special Topics in Complex Networks HEALTH DYNAMICS - BOUVÉ COLLEGE OF HEALTH SCIENCES Title is required to complete this concentration. spreading on Networks: From Epidemics to Memes ter hours from the following: Bioinformatics Computational Methods 1 Biostatistics in Public Health Applied Regression Analysis Social Epidemiology Advanced Methods in Biostatistics Causal Inference in Public Health Research Causal Inference in Public Health Research Causal Inference in Public Health Research Causal Inference in Scientific Computing ter hours from the following (students may opt to take the required course in the College of the Sciences concentrations for this section): Complexity in Social Systems Financial and Economic Networks Complex Network Analysis for Biological Systems Analyzing Higher-Order Networks Probabilistic Mathematics of Networks	Hours 4 6 4