

ARTICULATION AGREEMENT BETWEEN KEENE STATE COLLEGE AND NASHUA COMMUNITY COLLEGE

In the spirit of providing New Hampshire students with enhanced freedom of choice and access among Community College System of New Hampshire system partners, Keene State College (KSC) and Nashua Community College (NCC) enter into an Articulation Agreement for the delivery of academic programs and or curricula as identified in this document and in its appendices.

Students completing a minimum of 60 credits (credit bearing courses applied to community college requirements) at Nashua Community College will be admitted to Keene State College with junior status. Courses at Nashua Community College that are not equivalent to Keene State College major or Integrative Studies Program requirements but are credit bearing courses applied to community college requirements will be applied as general elective credits toward the baccalaureate degree. Students completing a minimum of 60 credits at Nashua Community College, in most cases, will have the opportunity to complete their baccalaureate degree in two years.

PURPOSE

The agreement will contribute to the seamless access to baccalaureate level study for Nashua Community College students who complete Associate degrees in:

- AA Liberal Arts: Mathematics Concentration (three possible routes to select)
- AA Liberal Arts: Psychology Concentration
- AS Web Application Development
- AS Software Development
- AS Early Childhood Education
- AS Business Administration: Management
- AS Business Administration: Marketing
- AS Mechanical Design Technology

The purpose of this Articulation Agreement is to provide the framework which specifies how individuals who complete:

- an Associate Degree of Arts in Liberal Arts: Mathematics Concentration at Nashua Community College may transfer credits into a Baccalaureate degree of Arts in Mathematics: Mathematics Option at Keene State College (Appendix A)

- an Associate Degree of Arts in Liberal Arts: Mathematics Concentration at Nashua Community College may transfer credits into a Baccalaureate degree of Arts in Mathematics: Secondary Teaching Option in conjunction with a BS Education: Secondary Teaching Option at Keene State College (Appendix B)
- an Associate Degree of Arts in Liberal Arts: Mathematics Concentration at Nashua Community College may transfer credits into a Baccalaureate degree of Arts in Mathematics: Middle School/Junior High Option in conjunction with a BS Education: Secondary Option at Keene State College (Appendix C)
- an Associate Degree of Arts in Liberal Arts: Psychology Concentration at Nashua Community College may transfer credits into a Baccalaureate degree of Arts in Psychology at Keene State College (Appendix D)
- an Associate Degree of Science in Web Application Development at Nashua Community College may transfer credits into a Baccalaureate degree of Science in Applied Computer Science at Keene State College (Appendix E)
- an Associate degree of Science in Software Development at Nashua Community College may transfer credits into a Baccalaureate degree of Science in Applied Computer Science at Keene State College (Appendix F)
- an Associate degree of Science in Early Childhood Education at Nashua Community College may transfer credits into a Baccalaureate degree of Science in Education: Early Childhood Development at Keene State College (Appendix G)
- an Associate degree of Science in Business Administration: Management at Nashua Community College may transfer credits into a Baccalaureate degree of Science in Management at Keene State College (Appendix H)
- an Associate degree of Science in Business Administration: Marketing at Nashua Community College may transfer credits into a Baccalaureate degree of Science in Management at Keene State College (Appendix I)
- an Associate degree of Science in Mechanical Design Technology at Nashua Community College may transfer credits into a Baccalaureate degree of Science in Sustainable Product Design and Innovation at Keene State College (Appendix J)

This agreement also specifies how general education courses taken at Nashua Community College will be applied to Keene State College's Integrative Studies Program (Appendix K)

Finally this agreement identifies courses taken at Nashua Community College that can be applied to various baccalaureate programs at Keene State College. These equivalencies create a pathway for students to transition from Nashua Community College to Keene State College. (Appendix L)

JOINT RESPONSIBILITIES

To the extent possible, Nashua Community College and Keene State College will publicize this Agreement and collaborate in joint marketing efforts. Nashua Community College and Keene State College will each review the status of the Agreement as appropriate and each party will notify the other of any opportunities or issues that need to be addressed.

COURSE AND/OR PROGRAM CHANGES

Any course or program changes at either Nashua Community College or Keene State College that impact the existing articulation agreement must be communicated to the designated campus representative at each institution.

PERIODIC REVIEW

Articulation agreements will be reviewed every five years to determine if any changes in course content or outcomes have occurred that might impact the existing agreement.

ACADEMIC STANDARDS

Keene State College assures the acceptance of an Associate degree graduate who has earned a grade point average of a 2.0 or better. Courses are evaluated on an individual basis to determine the appropriate academic equivalents.

Grades earned at other institutions are not included in the computation of the student's grade point average at Keene State College. Students should refer to the Keene State College Transfer of Credit Policy (<http://www.keene.edu/aca/transfer.cfm>). Once admitted students are responsible for becoming aware of, and meeting, the standard established for academic performance at Keene State College. A cumulative grade point average (GPA) of 2.00 is required to be in good academic standing.

TERM AND TERMINATION

This agreement will become effective immediately after all parties have signed. It may be terminated by either party by giving notice in writing to the other party at least twelve (12) months prior to the date of termination.

PROGRAM OVERSIGHT

Liberal Arts: Mathematics Concentration

The Nashua Community College Associate Degree in **Liberal Arts: Mathematics Concentration** is administered by the program coordinator (Barry Garside) and supervised by the chair of the department (Bob Bragdon). The Keene State College Baccalaureate in **Mathematics: Middle School/Junior High Teaching Option and Education: Secondary Education Option** is administered by chair of the department (Karen Stanish) and supervised by the Dean of Sciences.

Liberal Arts: Mathematics Concentration

The Nashua Community College Associate Degree in **Liberal Arts: Mathematics Concentration** is administered by the program coordinator (Barry Garside) and supervised by the chair of the department (Bob Bragdon). The Keene State College Baccalaureate in **Mathematics: Mathematics Option** is administered by the chair of the department (Karen Stanish) and supervised by the Dean of Sciences.

Liberal Arts: Mathematics Concentration

The Nashua Community College Associate's Degree in **Liberal Arts: Mathematics Concentration** is administered by the program coordinator (Barry Garside) and supervised by the chair of the department (Bob Bragdon). The Keene State College Baccalaureate in **Mathematics: Secondary Teaching Option and Education: Secondary Education Option** is administered by the chair of the department (Karen Stanish) and supervised by the Dean of Sciences.

Liberal Arts: Psychology

The Nashua Community College Associate Degree in **Liberal Arts: Psychology Concentration** is administered by the program coordinator (vacant) and supervised by the chair of the department (Robyn Griswold). The Keene State College Baccalaureate in **Psychology** is administered by chair of the department (Gary Bonitatibus) and supervised by the Dean of Sciences.

Website Application Development

The Nashua Community College Associate Degree in **Website Application Development** is administered by the program coordinator (David Hubbs) and supervised by the department chair (John Carlisle). The Keene State College Baccalaureate in **Applied Computer Science** is administered by the chair of the department (Mike Hanrahan) and supervised by the Dean of Sciences.

Software Development

The Nashua Community College Associate Degree in **Software Development** is administered by the program coordinator (David Hubbs) and supervised by the department chair (John Carlisle). The

Keene State College Baccalaureate in **Applied Computer Science** is administered by the chair of the department (Mike Hanrahan) and supervised by the Dean of Sciences.

Early Childhood Education

The Nashua Community College Associate Degree in Early Childhood Education is administered by the program coordinator (Suzanne Regan) and supervised by the chair of the department (Arthur Harris). The Keene State College Baccalaureate in Education: Early Childhood Development is administered by the chair of the department (Shirley McLoughlin) and supervised by the Dean of Professional and Graduate Studies.

Business Administration: Management

The Nashua Community College Associate Degree in **Business Administration: Management** is administered by the program coordinator (vacant) and supervised by the chair of the department (John Carlisle). The Keene State College Baccalaureate in **Management** is administered by the chair of the department (Linda Hadden) and supervised by the Dean of Sciences.

Business Administration: Marketing

The Nashua Community College Associate Degree in **Business Administration: Marketing** is administered by the program coordinator (vacant) and supervised by the chair of the department (John Carlisle). The Keene State College Baccalaureate in **Management** is administered by the chair of the department (Linda Hadden) and supervised by the Dean of Sciences.

Mechanical Design Technology

The Nashua Community College Associate Degree in Mechanical Design Technology is administered by the program coordinator (Doug Howe) and supervised by the chair of the department (Bob Bragdon). The Keene State College Baccalaureate in Sustainable Product Design and Innovation is administered by the chair of the department (Larry McDonald) and supervised by the Dean of Professional and Graduate Studies.

DISPUTE RESOLUTION

Notice of any and all complaints and/or grievances concerning this Agreement shall be provided to the administrators assigned to this contract. Both partners will work collaboratively to solve any said disputes.

ASSIGNMENTS

This Agreement may not be assigned or otherwise transferred by either party, in whole or in part, without the express prior written consent of the other party.

APPLICABILITY OF STATE LAW

This agreement shall be governed and interpreted under the laws of the State of New Hampshire.

APPENDIX A

AS Liberal Arts: Mathematics Concentration to BA Mathematics: Mathematics option

AS Liberal Arts: Mathematics Concentration	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/53	BA Mathematics: Mathematics option
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The Bachelor of Arts in Mathematic provides students breadth and depth through an integrated approach to the study of mathematics. The program prepares students for either an immediate career, especially teaching, or graduate school.

NCC	KSC
AA Liberal Arts: Mathematics Concentration	KSC Major Requirements
	Core Courses
MTHN 210 Calculus I	MATH 151 Calculus I
MTHN 211 Calculus II	MATH 152 Calculus II
	MATH 225 Introduction to Abstract and Discrete Mathematics
MTHN 215 Linear Algebra	MATH 231 Linear Algebra and Differential Equations
MTHN 217 Probability and Statistics	MATH 241 Probability and Statistics
	MATH 300 Introduction to Algebra and Analysis
	MATH 400 Capstone in Mathematics
	Select one course from the pure area:
	MATH 320 Geometry (required for prospective secondary teachers)
	MATH 337 Number Theory
	MATH 490 Topics in Pure Mathematics
	Select one course from the applied area:
MTHN 220 Elementary Differential Equations	This course will apply in this area
	MATH 242 Applied Statistics
MTHN 212 Calculus III	MATH 251 Vector Calculus
	MATH 341 Probability and Statistics II
	MATH 360 Numerical Methods
	MATH 361 Differential Equations
	MATH 365 Mathematical Modeling
	Plus one additional mathematics course at the 300-level or above, including IIMATH 310 and IIMATH 315
	Plus both of the following courses:
CPTN 202 Java Programming	CS 140 Computer Programming I
SCIN 231 Calculus-based Physics I	INPHYS 241 University Physics I

APPENDIX B

AS Liberal Arts: Mathematics Concentration to Dual Major in BS Education: Secondary Education Option and BA Mathematics: Secondary Teaching Option

AS Liberal Arts: Mathematics Concentration	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/53	BA Mathematics: Secondary Teaching option
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The Bachelor of Arts in Mathematic provides students breadth and depth through an integrated approach to the study of mathematics. The program prepares students for either an immediate career, especially teaching, or graduate school.

NCC	KSC
AA Liberal Arts: Secondary Teaching option	KSC Major Requirements
	Core Courses
MTHN 210 Calculus I	MATH 151 Calculus I
MTHN 211 Calculus II	MATH 152 Calculus II
	MATH 225 Introduction to Abstract and Discrete Mathematics
MTHN 215 Linear Algebra	MATH 231 Linear Algebra and Differential Equations
MTHN 217 Probability and Statistics	MATH 241 Probability and Statistics
	MATH 300 Introduction to Algebra and Analysis
	MATH 320 Geometry
	MATH 475 Issues and Trends in Math Education
	Plus one course from the applied area:
	MATH 242 Applied Statistics
MTHN 212 Calculus III	MATH 251 Vector Calculus
	MATH 341 Probability and Statistics II
	MATH 360 Numerical Methods
MTHN 220 Elementary Differential Equations	MATH 361 Differential Equations
	MATH 365 Mathematical Modeling
	Plus one additional mathematics course at the 300-level or above, including IIMATH 310 and IIMATH 315,
	Plus both of the following courses:
CPTN 202 Java Programming	CS 140 Computer Programming I
SCIN 231 Calculus-based Physics I	INPHYS 241 University Physics I
	Dual Major in Education Students selecting this option must meet the requirements for secondary teacher certification as follows:
EDUN 130 Foundations of Education	EDUC 100 Issues in Education
	EDUC 231 Curriculum for a Diverse World
	EDUC 331 Secondary Methods I
EDUN 140 Conflict Resolution in Education	EDUC 332 Secondary Classroom Management
EDUN 132 Introduction to Exceptionalities	EDSP 333 Secondary Special Education Issues
	EDUC 431 Secondary Methods II

	EDUC 432 Educational Theories/Trends
	EDUC 400 Student Teaching

APPENDIX C

AS Liberal Arts: Mathematics Concentration to Dual Major in BA in Mathematics: Middle School/Junior High Teaching Option and Education: Secondary Education option

The Bachelor of Arts in Mathematic provides students breadth and depth through an integrated approach to the study of mathematics. The program prepares students for either an immediate career, especially teaching, or graduate school.

AS Liberal Arts: Mathematics Concentration	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/53	BA Mathematics: Middle School/Junior High Teaching option
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NCC	KSC
AA Liberal Arts: Mathematics Concentration	KSC Major Requirements
	Core Courses
MTHN 217 Probability and Statistics	MATH 141 Introductory Statistics
MTHN 210 Calculus I	MATH 151 Calculus I
MTHN 211 Calculus II	MATH 152 Calculus II
	MATH 225 Introduction to Abstract and Discrete Mathematics
MTHN 215 Linear Algebra	MATH 231 Linear Algebra and Differential Equations
	MATH 275 Geometry for K-8 Teachers
	MATH 337 Number Theory
	MATH 375 Algebraic Concepts for K-8 Teachers
	MATH 475 Issues and Trends in Math Education
	Plus one additional mathematics course at the 300-level or above, including IAMTH 310 and IIMATH 315
	Plus the following course:
CPTN 202 Java Programming	CS 140 Computer Programming I
	Dual Major in Education Students selecting this option must meet the requirements for secondary teacher certification as follows:
EDUN 130 Foundations of Education	EDUC 100 Issues in Education
	EDUC 231 Curriculum for a Diverse World
	EDUC 331 Secondary Methods I
EDUN 140 Conflict Resolution in Education	EDUC 332 Secondary Classroom Management
EDUN 132 Introduction to Exceptionalities	EDSP 333 Secondary Special Education Issues
	EDUC 431 Secondary Methods II
	EDUC 432 Educational Theories/Trends

	EDUC 400 Student Teaching
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APPENDIX D

AS Liberal Arts: Psychology to BA Psychology

AS Liberal Arts: Psychology Concentration	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/54	BA Psychology
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The psychology program prepares students for success in a graduate program in psychology and/or a career in a psychology related field. The program exposes students to the methodologies, problems, bodies of knowledge, and broad range of perspectives found currently in psychology.

The application process for formal admission to the Psychology major occurs during the first or second semester of the sophomore year, e.g., upon completion of PSYC 101, PSYC 251, and either PSYC 242 or PSYC 253. To be admitted to the major, the student must achieve a minimum GPA of 2.5 and no less than a grade C in any of these three courses, and must be in good academic standing with the College.

NCC	KSC
AA Liberal Arts: Psychology Concentration	KSC Major Requirements
	Core Courses
PSYN 101 Introduction to Psychology	PSYC 101 General Psychology
	PSYC 251 Psychological Statistics
PSYN 220 Research Methods	PSYC 252 Research Methods in Psychology
	PSYC 253 Brain and Behavior
	PSYC 382 History of Psychology
	PSYC 495 Seminar
	Psychology Electives
	Select at least two courses from one of the following groups and at least one from each of the remaining groups
	Group 1
PSYN 202 Personality Psychology	PSYC 242 Personality
	PSYC 340 Psychological Testing
PSYN 210 Abnormal Psychology	PSYC 345 Abnormal Psychology
	PSYC 444 Counseling
	PSYC 447 Clinical Psychology
	Group 2
PSYN 207 Social Psychology	PSYC 221 Social Psychology
PSYN 205 Child Psychology	PSYC 311 Child/Adolescent Psychology
	PSYC 314 Adulthood and Aging
	PSYC 332 Ethology
	PSYC 425 Psychology of Women
	Group 3
	PSYC 321 Culture and Psychology
	PSYC 355 Psychology of Learning
	PSYC 357 Cognitive Processes
	PSYC 451 Motivation
	PSYC 453 Sensation and Perception

APPENDIX E

AS Website Application Development to BS Applied Computer Science

AS Website Application Development	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/44	BS Applied Computer Science
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The Bachelor of Science in Applied Computer Science provides students with a thorough grounding in computer programming and information science and an introduction to the various branches of computer science. The primary focus is to prepare students to successfully operate as information science (IS) or information technology (IT) professionals, and/or pursue graduate studies in CS or a related field.

NCC	KSC
AS Website Application Development	KSC Major Requirements
	Core Courses
MTHN 170 Discrete Mathematics AND Either MTHN 106 Elementary Statistics OR MTHN 217 Probability and Statistics	MATH 135 Mathematical Foundations for CS
CPTN 202 Java Programming	CS 140 Computer programming I
	Select one of the following:
CPTN 102 Website Development I AND CPTN 103 Website Development II	CS 150 Web Page Construction
CPTN 101 PC Assembly and Operating Systems	CS 160 Microcomputer Systems
CPTN 230 Advanced Programming using C++	CS 185 Computer Programming II
CPTN 278 Data Structures Using C++	CS 280 Data Structures and Algorithms
	Architecture and Programming Electives
	Choose one of the following:
CPTN 209 UNIX System Administration Using Linux	CS 210 Midrange Systems
	CS 215 Unix System Admin
	CS 265 Computer Architecture
	CS 367 Command Language Programming
	Choose one of the following:
CPTN 161 Programming Using Visual Basic	CS 205 User Interface and Visual Programming
	CS 220 COBOL Programming
CPTN 175 Intermediate Programming Using C++	CS 225 C++ Programming
	CS 230 RPG Programming
	CS 310 Assembly Language
	Advanced Electives
	Six upper-level courses (300/400 level) with a minimum of three being at 400 level. Current courses that satisfy this are:
	CS 310 Assembly Language
	CS 320 Operating Systems Design
CPTN 201 Client-side Scripting Using JavaScript	CS 340 Internet Programming
CPTN 140 Essentials of System Analysis and Design	CS 350 Systems Analysis and Project Management
	CS 355 Telecom and Computer Networks
CPTN 207 Database Design and Management	CS 360 Database Systems
	CS 367 Command Language Programming
	CS 375 Software Engineering

	CS 410 Advanced Software Development
	CS 420 E-Commerce Development
	CS 430 Study of Programming Languages
	CS 440 Software Engineering Project
	CS 460 Data Warehousing and Mining
	CS 462 DBS Project and Advanced SQL
	CS 485 Strategic Information Management
	CS 490 Advanced Special topics
	CS 495 Seminar
	CS 498 Independent Study
	Practical Experience
	Choose one:
	- CS 293 Supervised Field Experience - CS 493 Advanced Supervised Field Experience

APPENDIX F

AS Software Development to BS Applied Computer Science

AS Software Development	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/43	BS Applied Computer Science
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The Bachelor of Science in Applied Computer Science provides students with a thorough grounding in computer programming and information science and an introduction to the various branches of computer science. The primary focus is to prepare students to successfully operate as information science (IS) or information technology (IT) professionals, and/or pursue graduate studies in CS or a related field.

NCC	KSC
AS Software Development	KSC Major Requirements
	Core Courses
MTHN 170 Discrete Mathematics AND Either MTHN 106 Elementary Statistics OR MTHN 217 Probability and Statistics	MATH 135 Mathematical Foundations for CS
CPTN 202 Java Programming	CS 140 Computer programming I
	Select one of the following:
CPTN 102 Website Development I AND CPTN 103 Website Development II	CS 150 Web Page Construction
CPTN 101 PC Assembly and Operating Systems	CS 160 Microcomputer Systems
CPTN 230 Advanced Programming using C++	CS 185 Computer Programming II
CPTN 278 Data Structures Using C++	CS 280 Data Structures and Algorithms
	Architecture and Programming Electives
	Choose one of the following:
CPTN 209 UNIX System Administration Using Linux	- CS 210 Midrange Systems - CS 215 Unix System Admin - CS 265 Computer Architecture - CS 367 Command Language Programming
	Choose one of the following:
CPTN 161 Programming Using Visual Basic	CS 205 User Interface and Visual Programming

	CS 220 COBOL Programming
CPTN 175 Intermediate Programming Using C++	CS 225 C++ Programming
	CS 230 RPG Programming
	CS 310 Assembly Language
	Advanced Electives
	Six upper-level courses (300/400 level) with a minimum of three being at 400 level. Current courses that satisfy this are:
	CS 310 Assembly Language
	CS 320 Operating Systems Design
CPTN 201 Client-side Scripting Using JavaScript	CS 340 Internet Programming
CPTN 140 Essentials of System Analysis and Design	CS 350 Systems Analysis and Project Management
	CS 355 Telecom and Computer Networks
CPTN 207 Database Design and Management	CS 360 Database Systems
	CS 367 Command Language Programming
	CS 375 Software Engineering
	CS 410 Advanced Software Development
	CS 420 E-Commerce Development
	CS 430 Study of Programming Languages
	CS 440 Software Engineering Project
	CS 460 Data Warehousing and Mining
	CS 462 DBS Project and Advanced SQL
	CS 485 Strategic Information Management
	CS 490 Advanced Special topics
	CS 495 Seminar
	CS 498 Independent Study
	Practical Experience
	Choose one:
	CS 293 Supervised Field Experience
	CS 493 Advanced Supervised Field Experience

APPENDIX G

AS Early Childhood Education to BS Education: Early Childhood

AS Early Childhood Education	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/45	BS Education: Early Childhood Development
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Suzanne Regan Early Childhood Education Program Coordinator 603-578-8900 Ext. 1646 sregan@ccsnh.edu

Students seeking certification in **Early Childhood Development** are required to complete a liberal arts major in **one** of the following areas:

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> American Studies Applied Computer Science Art (portfolio requirement) | <ul style="list-style-type: none"> Biology Chemistry Chemistry-Physics Communication | <ul style="list-style-type: none"> Computer-Mathematics Economics English |
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- Environmental Studies
- Film Studies
- French
- General Science
- Geography
- Geology
- History
- Holocaust and Genocide Studies
- Individualized Major
- Journalism
- Mathematics
- Mathematics-Physics
- Music (audition required)
- Psychology
- Social Science
- Sociology
- Spanish
- Theatre and Dance

Early Childhood Development Option: 48 credits, plus liberal arts major

**** To be accepted as transfer credit, EDUC 311 requires presentation of portfolio of all work for courses as shown**

NCC	KSC
EDUN 101 Foundations of Early Childhood Education	EDUC 100 Issues in Education
HISN 260 History of Multiculturalism	EDUC 200 Social Contexts of Education
EDUN 102 Growth & Development of the Young Child AND EDUN 105 Children With Special Needs and Their Families OR EDUN 132 Introduction to Exceptionalities AND PSYN 201 Human Growth & Development	EDSP 202 Development, Exceptionality, And Learning
	MATH 171 Structure of Number Systems
	A course in Children's Literature
EDUN 103 Safe and Healthy Programs for Early Childhood Education EDUN 104 Curriculum for Early Childhood Care and Education EDUN 190 Practicum I EDUN 200 Developmentally Appropriate Programs for Infants and Toddlers EDUN 203 Emerging Literacy in Early Childhood Education EDUN 204 Behavior Guidance and Classroom Management in Early Childhood Education EDUN 215 Creativity and the Young Child Plus portfolio of work for all 7 classes	EDUC 311 Early Childhood Methods I: Infant/Toddler/Preschool
	EDUC 312 Early Childhood Methods II: Primary Grades (K-3)
	EDUC 400 Student Teaching
	EDUC 410 EC Student Teaching Seminar

APPENDIX H

AS Business Administration: Management to BS Management

AS Business Administration: Management	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/38	BS Management
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This career-oriented program, emphasizing management skills and building on a solid foundation in the liberal arts and sciences, is designed to prepare individuals for management careers in industrial or public organizations and for graduate work.

NCC	KSC
AS Business Administration: Management	KSC Major Requirements
BUSN 110 Principles of Management	MGT 101 Introduction to Management
MTHN 206 Statistics for Business and Social Sciences	MGT 202 Quantitative Decision Making
ACCN 101 Financial Accounting	MGT 213 Financial Accounting
ACCN 210 Managerial Accounting	MGT 214 Managerial Accounting
BUSN 218 Dynamics of Organizational Behavior	MGT 301 Organizational Theory and Behavior <i>**Credits will be applied to the degree, but in addition students must complete MGT 355 Business Negotiations OR MGT 324 Human Resource Management</i>
	MGT 319 Financial Management
BUSN 104 Principles of Marketing	MGT 331 Principles of Marketing <i>**Credits will be applied to the degree, but in addition students must complete MGT 434 Marketing Research OR MGT 333 Advertising & Promotion to complete the requirements for this course</i>
BUSN 230 Introduction to Management of Information Systems	MGT 381 Management Information Systems
	MGT 451 Social, Legal, and Political Environment of Business
	MGT 491 Business Policy and Strategy
	MGT electives (4 credits at 300 or 400 level)
	Allied Discipline Requirements
ENGN 109 Oral Communication	IH COMM 171 Public Speaking
BCPN 101 Introduction to Computers	CS 101 Introduction to Computer Information Processing
ECON 201 Microeconomics	ECON 103 Introduction to Microeconomics
ECON 202 Macroeconomics	ECON 104 Introduction to Macroeconomics

APPENDIX I

AS Business Administration: Marketing to BS Management

AS Business Administration: Marketing	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/39	BS Management
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This career-oriented program, emphasizing management skills and building on a solid foundation in the liberal arts and sciences, is designed to prepare individuals for management careers in industrial or public organizations and for graduate work.

NCC	KSC
AS Business Administration: Marketing	KSC Major Requirements
BUSN 110 Principles of Management	MGT 101 Introduction to Management
MTHN 206 Statistics for Business and Social Sciences	MGT 202 Quantitative Decision Making
ACCN 101 Financial Accounting	MGT 213 Financial Accounting

ACCN 210 Managerial Accounting	MGT 214 Managerial Accounting
BUSN 218 Dynamics of Organizational Behavior	MGT 301 Organizational Theory and Behavior <i>**Credits will be applied to the degree, but in addition students must complete MGT 355 Business Negotiations OR MGT 324 Human Resource Management</i>
	MGT 319 Financial Management
BUSN 104 Principles of Marketing	MGT 331 Principles of Marketing <i>**Credits will be applied to the degree, but in addition students must complete MGT 434 Marketing Research OR MGT 333 Advertising & Promotion to complete the requirements for this course</i>
BUSN 230 Introduction to Management of Information Systems	MGT 381 Management Information Systems
	MGT 451 Social, Legal, and Political Environment of Business
	MGT 491 Business Policy and Strategy
	MGT electives (4 credits at 300 or 400 level)
	Allied Discipline Requirements
ENGN 109 Oral Communication	IH COMM 171 Public Speaking
BCPN 101 Introduction to Computers	CS 101 Introduction to Computer Information Processing
ECON 201 Microeconomics	ECON 103 Introduction to Microeconomics
ECON 202 Macroeconomics	ISECON 104 Introduction to Macroeconomics

APPENDIX J

AS Mechanical Design Technology to BS Sustainable Product Design and Innovation

AS Mechanical Design Technology	http://www.nashuacc.edu/academics/programs-of-study/associate-degree-programs/57	BS Sustainable Product Design and Innovation
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Technology Studies Dept. Chair: Ken Coletta 603-578-8900 Ext. 1644 kcoletta@ccsnh.edu

The Sustainable Product Design and Innovation major at Keene State College is a pre-professional four-year program offering a cross-disciplinary curriculum to give the student a solid foundation in the artistic, scientific, and technical aspects of product design and the social and scientific aspects of sustainability concerns. Graduates are prepared to pursue graduate study or transition directly into careers in product design/engineering, technology/evaluation, planning, supply, production, quality control, technical services, marketing, sales, or other related professions.

NCC	KSC
<i>AS Mechanical Design Technology</i>	<i>SPDI Core Courses</i>
ETMN 101 Electronics AND EETN 121 Digital Circuits I	SPDI 110 Electricity and Electronics Fundamentals
	SPDI 152 Product Design I
MTTN 111 Machine Tool Processes and Theory I (with portfolio review of projects completed)	SPDI 180 Metal Processes and Prototyping

	SPDI 252 Product Design II
	SPDI 253 Materials: A Life-Cycle View
CADN 112 CADD II (with portfolio review)	SPDI 221 Three-dimensional CADD
	SPDI 352 Product Design III
	<i>Management Core Courses</i>
BUSN 110 Principles of Management	MGT 101 Introduction to Management
MTHN 206 Statistics for Business and Behavioral Sciences	MGT 202 Quantitative Decision-making
	MGT 331 Principles of Marketing---OR--- MMGT 446 Competitive Manufacturing Management
CADN 111 CADD I (with portfolio review)	Choose 4 credits from the following: SPDI 121 Drafting, Sketching, and CADD SPDI 170 Introductions to Woodworking Tech SPDI 270 Woodworking Processes SPDI 280 CAD/CAM: Using MasterCAM
MTTN 123 Principles of CNC.....→ AND MTTN 223 Computer Aided Manufacturing (CAM)	MGT 451 Social, Legal, and Political Environment of Business SPDI 290 Special Topics SPDI 298 Independent Study SPDI 490 Advanced Special Topics SPDI 495 Seminar SPDI 498 Independent Study
	<i>Required Allied Discipline Courses</i>
	**8 credits plus 4 credits Integrative Studies
	• IA Art 103 Three-dimensional Design
	• SAFE 204 Human Factors in Safety
MTHN 110 Algebra and Trigonometry MTHN Pre-calculus MTHN 210 Calculus	• Select at least one of the following: MATH 120 Applied Algebra and Trig MATH 130 Pre-calculus MATH 151 Calculus
	<i>SPDI Capstone Course</i>
	SPDI 400 Manufacturing Enterprise

APPENDIX K - General Education and Integrative Studies Program Equivalencies

Nashua Community College General Education Core

The College takes seriously its obligation to graduate individuals who understand their responsibilities as citizens, as family members, as friends, and as employees. Additionally, the College strives to instill a firm belief in its graduates for the need for continuous development and lifelong learning.

Through its General Education core requirements, the College expects its graduates to have developed:

- English language skills so they can communicate clearly, both orally and in writing, and can critically evaluate what they hear and read
- The ability to use technology to access information

- An appreciation and understanding of the scientific method, and the relationship between the sciences and other human activities
- An appreciation and understanding of the methods of inquiry used in the social and behavioral sciences, and of the ways people act and have acted in response to the conditions in their societies
- An appreciation for the logic of mathematical reasoning and the capacity to perform mathematical skills
- Aesthetic sensitivity and skills as well as an ability to make informed value judgments
- An appreciation and understanding of economics, history and government
- An emphasis on lifelong learning.

Requirements – 25 credits

KSC ISP

Requirements – 44 credits (11 Courses), with a minimum of eight credits (2 courses) at the 300 and/or 400 level.

Students may have limitations as to how to apply credits toward ISP depending on their chosen major.

All KSC students completing majors in the School of Arts and Humanities must complete one semester of a language other than English

Nashua CC General Education	KSC ISP
English 101	ITW 101
MTHN 106	IQL 101
Arts FARN Courses and/or HUMN102, HUMN103, HUMN104, HUMN120, HUMN130	IA (minimum 4 credits [one course], maximum 8 credits [2 courses] to meet ISP requirements)
Humanities Any ENGN College-Level Courses HISN Courses and/or HUMN107, HUMN109, HUMN140, HUMN220, HUMN230, HUMN260, LNGN101 LNGN102, LNGN105, LNGN106, LNGN205, LNGN206, LNGN109, LNGN110, LNGN113, LNGN114, LNGN115, LNGN214, ENGN 109	IH (minimum 8 credits [2 courses] maximum 12credits [3 courses] to meet ISP requirements , in two different disciplines)
Sciences SCIN Courses (101, 102, 111, 115, 130, 131, 141, 142, 150, 151, 160, 205, 215, 220, 231, 242)	IN (minimum 8 credits [2 courses] to meet ISP requirements in two different disciplines)
Social Sciences Any: PSYN Courses SOCN Courses ECON Courses GEON Courses POLN Courses	IS (minimum 8 credits [2 courses] to meet ISP requirements in two different disciplines)
HUMA 110, PJSN 140, SCIN 117, SNLN 201	II (minimum 4 credits [1 course] to meet ISP

	requirements
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APPENDIX L

BA American Studies

The American Studies program offers students an interdisciplinary liberal arts education. Students in American Studies engage in a challenging exploration of historical and contemporary American culture and the American multicultural identity, including its past and present values, conflicts, and experiences. American Studies prepares students for career opportunities in elementary and secondary education; graduate school; law school; business; work in libraries, museums, and historic preservation; newspaper, magazine, broadcast journalism; film or media work; work in federal, state, and local agencies, both public and private; government and politics; nonprofit organizations; writing, editing, and publishing; international relations and diplomacy; public relations and advertising; and social services.

→Language Requirement: Each student must demonstrate proficiency in a language other than English

NCC	KSC
	KSC Major Requirements
	Core Courses
	IIAMST 210 Introduction to American Studies
	IIAMST 250 Interpreting American Cultures
	AMST 350 Perspectives on American Culture
	AMST 495 Seminar
	Select one of the following:
	• AMST 390 Critical Approaches
	• AMST 490 Advanced Special Topics
	Area Courses
	Select two courses from American History:
HISN 140 US History from the Colonial Era to Reconstruction	• HIST 261 US Social History I: 1603-1865
	• HIST 265 Military in US Society I
	• HIST 266 Military in US Society II
	• HIST 360 American Colonies until 1763
	• HIST 361 The American Revolution
	• HIST 362 Early American Republic 1789-1850
	• HIST 363 US in the Civil War Period: 1850-1876
	• HIST 364 19 th Century America
	• HIST 365 Gilded Age and Progressive Era America
	• HIST 366 US in Crisis: 1920-1950
	• HIST 367 Modern America: 1950-Present
	Select one course in American literature:
ENGN 215 Literature by American Women	• ENG 280 Cultural Studies

ENGN 240 American Literature I	• ENG 341 Early American Literature
HUMN 260 Counterculture in the USA: 1956-1976	• ENG 344 Studies in American Literature
	• ENG 345 Studies in African-American Literature
	• ENG 346 Transcendentalism
	• ENG 347 Modern American Indian Literature
	• ENG 370 Studies in Literature of the Americas
	Select two courses from Arts & Humanities and/or Social Sciences
	• ART 214 Modern Art
	• IHAMST 248 Cultures of Plains Indians
	• ECON 455 US Economic History
ENGN 240 American Literature I OR HUMN 260 Counterculture in the USA: 1956-1976	• IHENG 240 Readings in American Literature
	• IENG 245 African American Literature and Culture AA
	• IIFR 240 Franco-American Women's Voices
	• IAMU 112 Latin American Music
	• IAMU 216 History of Rock and Roll
HUMN 104 Jazz and Its Roots	• MU 218 History of Jazz
	• IAMU 242 Listening to America
	• PHIL 304 American Philosophy
POLN 102 American Government and Politics	• ISPOSC 210 US Politics
POLN 201 State and Local Government	• ISPOSC 211 US: State and Local Politics
	• POSC 316 Constitutional Law
	• POSC 321 Foreign Policy and Globalization
	• CJS 101 Introduction to Criminal Justice
SOCN 205 The Changing Family	• SOC 345 Sociology of Families
	• SOC 270 Urban Society
	• SOC 472 Sociology of Health and Medicine
	• SOC 475 Social Stratification
	• SP 330 Latinos in the United States

BA Earth/Space Science

This program is designed to prepare candidates for teaching Earth/Space science in grades 7-12. In addition to meeting all of the degree requirements set by Keene State College (Earth/Space, education, and integrative studies), this program will result in certification for secondary school teaching by the state of New Hampshire in a nationally recognized science education program.

Please note that students seeking certification at the secondary level in Earth and Space Science should refer to the Secondary Education option in the Education major section of the catalog for a list of additional course requirements.

BA in Earth/Space Science with Secondary Education Certification --- 126 credits

BA without certification --- 120 credits

NCC	KSC
	Major Requirements
	INGEOL 151 Physical Geology
	GEO 206 Oceanography
	GEO 301 Mineralogy
	GEO 305 Paleontology
	GEO 306 Sedimentation and Stratigraphy
	GEO 315 Environmental Geology
SCIN 116 Meteorology	INMET 225 Meteorology
SCIN 142 General Chemistry I	INCHEM 111 General Chemistry I & Lab
SCIN 143 General Chemistry II	CHEM 112 General Chemistry II & Lab
SCIN 130 Physics I	INPHYS 141 College Physics I
	BIO 111 Evolution
MTHN 106 Elementary Statistics	MATH 141 Statistics
	Select one of the following:
SCIN 115 Astronomy	• INASTR 107 Introduction to Astronomy • ASTR 307 University Astronomy
	Select one of the following:
MTHN 110 Algebra and Trigonometry	• MATH 120 Applied Algebra and Trigonometry
MTHN 120 PreCalculus	• MATH 130 Precalculus
MTHN 210 Calculus I	• MATH 151 Calculus I

BA Economics

The B.A. in Economics combines rigorous training in economic theory with application to contemporary issues such as globalization, financial market volatility, and the environment. The Economics program is a tight-knit community, and majors and minors can expect to work closely with faculty and with each other. The economic honors society, Omicron Delta Epsilon, organizes field trips to conferences and brings in visiting speakers and alumni. Recent graduates have gone on to careers in business and government, to law school, and to graduate programs in economics and politics, as well as M.B.A. programs.

NCC	KSC
	KSC Major Requirements
	Core Courses
HUMN 110 Critical Thinking Skills	IHPHIL 100 Logical Argumentation
	Select one of the following:
MTHN 106 Elementary Statistics	MATH 141 Introductory Statistics
	PSYC 251 Psychological Statistics
ECON 201 Microeconomics	ECON 103 Introduction to Microeconomics
ECON 202 Macroeconomics	ISECON 104 Introduction to Macroeconomics
	ISECON 360 History of Economic Thought
	ECON 203 Intermediate Microeconomics
	ECON 204 Intermediate Macroeconomics
	ECON 491 Economic Research Project
	Economics Electives
	12 credits of 300- or 400-level Economics courses

BA General Science

The B.A. in General Science provides a broad-based foundation in three major areas: Earth/Space Science, Life Science, and Physical Science. This major would provide general science knowledge for working in science museums, zoos, science camps, or state or national parks.

NCC	KSC
	Major Requirements
SCIN 115 Astronomy	INASTR 101 Introduction to Astronomy
	BIO 110 Molecules and Cells
	BIO 111 Evolution
	INGEOL 151 Physical Geology
	GEOL 206 Oceanography
SCIN 116 Meteorology	INMET 225 Meteorology
	Select one course:
MTHN 110 Algebra and Trigonometry	MATH 120 Applied Algebra and Trigonometry
MTHN 120 PreCalculus	MATH 130 Precalculus
MTHN 210 Calculus I	MATH 151 Calculus I
	Bachelor of Arts Requirements
	MATH 141 Introductory Statistics
	BIO 210 Ecology
SCIN 142 General Chemistry I	INCHEM 111 General Chemistry I
	CHEM 112 General Chemistry II
SCIN 242 Organic Chemistry I	CHEM 221 Organic Chemistry I
	CHEM 222 Organic Chemistry II
	GEOL 252 Evolution of the Earth
SCIN 130 Physics I	INPHYS 141 College Physics I
SCIN 131 Physics II	PHYS 142 College Physics II
	In addition to the above, complete a specialization (three or more courses at 300 level or higher) in <u>one</u> of the following areas: Biology, Chemistry, Environmental Studies, or Geology

BA General Science: Education

The B.A. in General Science provides a broad-based foundation in three major areas: Earth/Space Science, Life Science, and Physical Science. It is an ideal major for the pre-service elementary or middle school teacher as it addresses national recommendations for improving science education with an activity and hands-on focus. The middle school option meets N.H. state certification requirements for grades 5-9

Students must fulfill the "major requirements" below while also selecting either educational level option also found below. In addition, degree requirements must be met for the Education major (as listed in the college catalog under "Education") at the chosen level (see following breakdown of hours)

BA in General Science: Education – dual major

- Elementary: 48 hours Gen Sci major, 48 hours elementary education courses
- Middle School: 60 hours Gen Sci major, 34 hours education courses
-

NCC	KSC
	Major Requirements
SCIN 115 Astronomy	INASTR 101 Introduction to Astronomy
	BIO 110 Molecules and Cells
	BIO 111 Evolution
	INGEOL 151 Physical Geology
	GEOL 206 Oceanography
SCIN 116 Meteorology	INMET 225 Meteorology
	Select one course:
MTHN 110 Algebra and Trigonometry	MATH 120 Applied Algebra and Trigonometry
MTHN 120 PreCalculus	MATH 130 Precalculus
MTHN 210 Calculus I	MATH 151 Calculus I
	Elementary or Early Childhood Option
SCIN 141 Introduction to Chemistry	INCHEM 103 Fundamentals of Chemistry
	INPHYS 201 Phenomenal Science
	GM 301 The Web of Science
	Also select two additional science courses at the 200 level or higher in either the same or different areas: Biology, Chemistry, Environmental Studies, and/or Geology
	Middle School Option
SCIN 142 General Chemistry I	INCHEM 111 General Chemistry I
SCIN 143 General Chemistry II	CHEM 112 General Chemistry II
	BIO 210 Ecology
MTHN 106 Elementary Statistics	MATH 141 Introductory Statistics
	INPHYS 201 Phenomenal Science
	IIPHYS 210 History of Science
	Also complete a specialization (two or more additional courses at the 200 level or higher) in one of the following areas: Biology, Chemistry, Environmental Studies, or Geology.

BA History

By combining the development of specific skills with the acquisition of a body of historical knowledge, the History major prepares students for successful careers in primary and secondary education (history and social studies), business and industry, and governmental service. The major also prepares students for graduate study in history, law, and other academic and professional fields.

Students majoring in History are required to complete 36 credit hours in History, 20 credits of which must be in **one** of the following areas of specialization:

- U.S. History
- European History
- 19th-Century Studies
- 20th-Century Studies

At least 16 of the 20 credit hours toward the area of specialization must be at the 300 level (or higher). At least 4 of the 20 credit hours must be at the 400 level.

Students majoring in History must also complete History 200: Reading and Writing in History.

→Language Requirement: Each student must demonstrate proficiency in a language other than English.

MAJOR REQUIREMENTS

36 credits

- **4 credits** at the 100 level
- **8 credits** at the 200 level, including History 200
- **16 credits** at the 300 level
- **8 credits** at the 400 level

Following please find listings of NCC courses which match available KSC courses:

NCC	KSC
HISN101 Western Civilization from Ancient Times Through the 17th Century OR HISN102 Western Civilization Since the French Revolution	Meets the 4 credit 100-level requirement <i>Equivalent to HIST 141 Western Civilization – Origins to 1500 & HIST 142 Western Civilization – 1500 to the Present</i>
HISN140 U.S. History from the Colonial Era to Reconstruction	HIST 161 Topics in United States History I
HISN141 U.S. History Since Reconstruction	HIST 162 Topics in United States History II
HISN232 History of Modern Asia	HIST 290 Special Topics

BA Sociology

The Sociology program offers students knowledge and resources to search systematically for answers to questions about society. Sociology students develop a sociological imagination, which is the ability to grasp the close relationship between personal experiences and the larger social world. Our majors study social and cultural forces that shape individual and group behavior using a variety of scientific methods such as surveys, interviews, observation, and content analysis. By studying and critically assessing sociological theories, sociology students also describe, interpret, and explain how the world works.

Core courses provide excellent training in sociological concepts, theories, and methods. Electives focus on topics like the environment, popular culture, families, inequalities, race and ethnicity, crime and deviance, anthropology, and global society. Sociology majors may also engage in community research, service-learning projects, internships, and travel through coursework. Students with a bachelor's degree in sociology are well prepared for graduate and professional studies and careers using their interpersonal skills and specialized knowledge in the areas of education, social services, human rights, health and wellness, justice, advocacy, and research.

To earn a degree in Sociology, the student must earn a grade C or better in the following core courses: SOC 201 SOC 301, SOC 303, and SOC 305. Courses may be retaken as needed to meet this requirement.

NCC	KSC
	Core Courses
SOCN 101 Introduction to Sociology	SOC 201 Introduction to Sociology Major
	SOC 301 Sociological Research Methods

	SOC 303 Sociological Quantitative Analysis
	SOC 305 Sociological Theory
	KSC Major Requirements
	Select one of the following:
SOCN 110 Cultural Anthropology	ISANTH 110 Cultural Anthropology
SOCN 108 Introduction to Archeology	ISANTH 111 Archeology and Physical Anthropology
	Select one of the following:
	HGS 427/SOC 427 Sociological Topics in Genocide
	SOC 450 Mind, Self, and Society
	SOC 455 The Body and Sexuality in Society
	SOC 461 White-Collar Crime
	SOC 472 Sociology of Health and Medicine
	SOC 475 Social Stratification
	SOC 480 Political Sociology
	SOC 485 Science and Society
	SOC 490 Advanced Topics in Sociology
	Sociology Electives
SOCN 201 Contemporary Social Problems SOCN 205 The Changing Family SOCN 206 Sociology of Deaf Culture SOCN 228 Class, Status, and Power	12 credits in sociology electives must be taken. Four credit hours of Anthropology courses can be used to satisfy this requirement <i>SOCN 201 is equivalent to IS-SOC 310, but in addition student must complete two upper-level (300 or 400) ISP courses at Keene State</i>

BS Biology

The B.S. program also provides undergraduate preparation for technical employment or post-baccalaureate study in graduate school or for professions such as medicine, dentistry, veterinary medicine, teaching, and natural resource management.

NCC	KSC
	KSC Major Requirements
SCIN 101 Biology I	BIO 110 Molecules and Cells
SCIN 102 Biology II: An Evolutionary Journey	BIO 111 Evolution
SCIN 220 Ecology	BIO 210 Ecology
SCIN 160 Genetics	BIO 211 Genetics
	BIO 212 Cells and Physiology
	BIO 495 Senior Seminar
	Related Math or Science Courses
SCIN 142 General Chemistry I	INCHEM 111 General Chemistry I
SCIN 143 General Chemistry II	CHEM 112 General Chemistry II
SCIN 242 Organic Chemistry	CHEM 221 Organic Chemistry I
	CHEM 222 Organic Chemistry II
SCIN 130 Physics I	INPHYS 141 College Physics I
SCIN 131 Physics II	PHYS 142 College Physics II
MTHN 106 Elementary Statistics	MATH 141 Introductory Statistics
	Upper Level Courses
	Select one from each of the following categories:
	Animal Diversity
	• BIO 333 Invertebrate Zoology

	BIO 334 Vertebrate Zoology
	BIO 335 Ornithology
	Plant and Microbial Diversity
	BIO 363 Plant Biology
	BIO 365 Plant Evolution
	BIO 367 Microbial Diversity
	Ecology and Evolution
SCIN 117 Environmental Science	BIO 343 Ecosystem Ecology
	BIO 345 Animal Behavior
	BIO 347 Plant Physiological Ecology
SCIN 160 Genetics	BIO 349 Population Genetics
	Cell/molecular/physiology
	BIO 371 Ecophysiology
	BIO 373 Neuroethology
	BIO 375 Biochemistry
	BIO 376 Molecular Biology
	BIO 377 Immunology
	BIO 379 Comparative Animal Physiology
	Upper-level BIO Electives
	Select any two 300- or 400- levels courses to bring total credits in Biology to 48 credits.
SCIN 202 Anatomy & Physiology II	Students may take BIO 232 Human Anatomy and Physiology II for 4 credits of the upper-level elective BIO credits

BS Chemistry

The B.S. in Chemistry should serve as a general preparation for a professional scientist. The major was designed according to guidelines from the American Chemical Society (ACS) to be rigorous, yet flexible enough to allow for preparation for immediate employment, graduate study, or work in an allied profession.

NCC	KSC
	Integrative Studies Requirements
SCIN 142 General Chemistry I	INCHEM 111 General Chemistry I
SCIN 143 General Chemistry II	CHEM 112 General Chemistry II
SCIN 242 Organic Chemistry I	CHEM 221 Organic Chemistry I
SCIN 243 Organic Chemistry II	CHEM 222 Organic Chemistry II
	CHEM 251 Quantitative Analysis
	CHEM 341 Physical Chemistry I
	CHEM 342 Physical Chemistry II
	CHEM 363 Inorganic Chemistry
	CHEM 375 Biochemistry
	CHEM 421 Advanced Synthetic Chemistry
	CHEM 454 Instrumental Analysis
	Select from one of the following:
	CHEM 321 Organic Chemistry III
	CHEM 333 Medicinal Chemistry
	CHEM 373 Polymer Chemistry

	Related Field
MTHN 217 Probability and Statistics	MATH 141 Introductory Statistics
MTHN 210 Calculus I	MATH 151 Calculus I
MTHN 211 Calculus II	MATH 152 Calculus II
	Select one PAIR from the following:
SCIN 130 Physics I and SCIN 131 Physics II	INPHYS 141 College Physics I and PHYS 142 College Physics II
SCIN 230 Calculus-based Physics I and SCIN 232 Calculus-based Physics II	INPHYS 241 University Physics I and PHYS 242 University Physics II
SCIN 101 Biology I	BIO 110 Molecules and Cells

BS Education: Secondary

Building on the historical legacy of teacher preparation at Keene State College, the Education program mission is to prepare competent, reflective classroom teachers and other professional school personnel who utilize effective teaching practices and who create developmentally appropriate educational environments for diverse learners. Keene State College has been an NCATE accredited institution since 1954.

Transfer Credits - Students who wish to transfer credits into a teacher certification option must apply through the department chair. ** The PRAXIS must be passed prior to acceptance to KSC Education program.

Liberal Arts Major - The New Hampshire State Department of Education requires students completing Education majors to also demonstrate depth of knowledge in a content area. Therefore, Education majors must also fulfill requirements of a liberal arts major.

Students seeking certification in **Middle or Secondary Education** are required to complete a liberal arts major in **one** of the following areas:

- Biology
- Chemistry
- Chemistry – Physics
- Earth/Space Science
- English
- General Science
- Geography
- Geology
- History
- Mathematics
- Modern Languages (French or Spanish)
- Physical Science
- Social Science

It is **STRONGLY** recommended that a transfer student complete a number of these courses in their selected liberal arts major prior to transfer to ensure course sequencing and to enter KSC with a solid foundation.

NCC	KSC
EDUN 130 Foundations of Education	EDUC 100 Issues in Education
	EDUC 231 Curriculum for a Diverse World
	EDUC 331 Secondary Methods I
EDUN 140 Conflict Resolution in Education	EDUC 332 Secondary Classroom Management
EDUN 132 Introduction to Exceptionalities	EDSP 333 Secondary Special Education Issues
	EDUC 431 Secondary Methods
	EDUC 432 Education Theories/Trends
	EDUC 400 Student Teaching

BS English: Literature option

Students in the literature option read a wide range of literature from various cultures and historical periods. English/Secondary Education majors must choose the Literature option and take one additional course, ENG 312 Descriptive Grammar.

LANGUAGE REQUIREMENT: Each student must demonstrate proficiency in a language other than English as specified by the Language Requirement for Students with Majors in the School of Arts and Humanities.

NCC	KSC
	Major Requirements
	Complete a minimum of 10 courses
ENGN 102 Writing About Literature	ENG 215 Literary Analysis
	ENG 315 Literary Form and History
	ENG 395 Sequence I
	ENG 495 Sequence II
	Six additional English courses: one 200 level, four at 300 level, and one at 400 level – either ENG 402 or ENG 490. At least four of these six courses must be in literature. One course must be in pre-1800 literature. One course must be a Differing Cultural Perspectives course.
	Courses that meet the pre-1800 requirement:
	• ENG 321 English Literature: Beginnings to 18 th Century
	• ENG 323 Medieval Literature
	• ENG 324 Chaucer
	• ENG 341 Early American Literature
	• ENG 326 English Renaissance Literature
	• ENG 327 Shakespeare: Poetry and Plays
	Courses that meet the Differing Cultural Perspectives requirement:
	• IHAMST 248 Cultures of Northern Plains Indians
	• IIENG 245 Readings in African American Literature and Culture
	• IHENG 252 Literature of the Holocaust
	• ENG 345 Studies in African American Literature
	• ENG 347 Modern American Indian Literature
	• ENG 370 Studies in Literatures of the Americas
	When appropriate, the following may fulfill either the pre-1800 literature or Differing Cultural Perspectives requirement:
ENGN 230 British Literature I	• IHENG 220 Readings in British Literature
ENGN 240 American Literature I	• IHENG 240 Readings in American Literature
	• IHENG 250 Readings in Continental Literature
	• IHENG 260 Readings in World Literature
ENGN 105 Introduction to Literature	• ENG 290 Topics
	• ENG 330 Studies in British Literature
	• ENG 344 Studies in American Literature
	• ENG 350 Studies in Continental Literature

	• ENG 360 Studies in World Literature
	• ENG 370 Studies in Literature of the Americas
	• ENG 381 Women Writers
	• ENG 390 Studies
	• ENG 395 Advanced Sequence I
	• ENG 490 Advanced Studies
	• ENG 495 Advanced Sequence II

BS English: Writing option

Students in the writing option also read a great deal of literature and study literary method, but focus their coursework on the writing of poetry, fiction, and creative nonfiction. Students may not pursue both the Writing option and the Writing minor. English/Secondary Education majors may not choose the Writing option.

LANGUAGE REQUIREMENT: Each student must demonstrate proficiency in a language other than English as specified by the Language Requirement for Students with Majors in the School of Arts and Humanities.

NCC	KSC
	Major Requirements
	Complete a minimum of 10 courses
	• Choose one course from:
	IAENG 204 Creative Writing
	ENG 202 Creative Nonfiction Writing
ENGN 206 Writing Short Stories OR ENGN 235 Poetry Workshop	ENG 208 Topics in Writing
	• Also required:
ENGN 102 Writing About Literature	ENG 215 Literary Analysis
	ENG 315 Literary Form and History
	ENG 402 Theory and Practice
	ENG 405 Writing Portfolio
	Three ENG electives at the 300 or 400 level, including one pre-1800 literature and one Differing Cultural Perspectives course.
	• Choose two additional writing courses at the 300 or 400 level (other than ENG 405)
	ENG 301 Fiction Workshop
	ENG 302 Poetry Workshop
	ENG 303 Nonfiction Workshop
	ENG 306 Autobiography Workshop
	ENG 308 Advanced Topics in Writing
	ENG 497 Writing/Publishing Workshop
	Courses that meet the pre1800 requirement:
	• ENG 321 English Literature: Beginnings to 18 th Century
	• ENG 323 Medieval Literature
	• ENG 324 Chaucer
	• ENG 341 Early American Literature
	• ENG 326 English Renaissance Literature

	ENG 327 Shakespeare: Poetry and Plays
	Courses that meet the Differing Cultural Perspectives requirement:
	IHAMST 248 Cultures of Northern Plains Indians
	IIENG 245 Readings in African American Literature and Culture
	IHENG 252 Literature of the Holocaust
	ENG 345 Studies in African American Literature
	ENG 347 Modern American Indian Literature
	ENG 370 Studies in Literatures of the Americas
	When appropriate, the following may fulfill either the pre-1800 literature or Differing Cultural Perspectives requirement:
ENGN 230 British Literature I	IHENG 220 Readings in British Literature
ENGN 240 American Literature I	IHENG 240 Readings in American Literature
ENGN 241 American Literature II	
	IHENG 250 Readings in Continental Literature
	IHENG 260 Readings in World Literature
	ENG 290 Topics
	ENG 330 Studies in British Literature
	ENG 344 Studies in American Literature
	ENG 350 Studies in Continental Literature
	ENG 360 Studies in World Literature
	ENG 370 Studies in Literature of the Americas
	ENG 381 Women Writers
	ENG 390 Studies
	ENG 395 Advanced Sequence I
	ENG 490 Advanced Studies
	ENG 495 Advanced Sequence II

BS Health Science: Health Promotion/ Wellness

Health Promotion and Wellness option graduates work to change policies, environments, attitudes, and behaviors that affect health. The Community Health specialization prepares students for professional careers in community health education, global health, or for graduate programs in public health or health education. The Behavior and Health Specialization prepares students for such graduate programs as Health Psychology, Pain Management, or Behavioral Health.

By the fall 2012 semester, INHLSC 175 will replace all the following courses:

HLSC 115 Nutrition and Well-Being
 HLSC 125 Nutrition and the Profession
 HLSC 214 Nutrition Fundamentals

NCC	KSC
	KSC Major Requirements
	Core Courses
CHWN 101 Foundations of Health & Wellness	HLSC 101 Health and Wellness
	HLSC 285 Health in Society

	HLSC 380 Addiction: Theory, Research, and Practice
	HLSC 385 Behavior Change Facilitation
	HLSC 485 Health Promotion Practice
	Select one of the following:
	HLSC 494 Health Science Capstone
	HLSC 495 seminar: Health Science Research
	Health Promotion and Wellness Option
	<i>The Health Promotion and Wellness option offers two specializations: Community Health and Behavior and Health. Students select one of the specializations and complete option requirements and specialization requirements.</i>
	Health Promotion and Wellness Requirements
SCIN 120 Nutrition	HLSC 214 Nutrition Fundamentals
	HLSC 365 Exercise Science and Application
	Allied Discipline Requirements
SCIN 201 Anatomy & Physiology I w/lab	BIO 230 Human Anatomy & Physiology w/ lab
SCIN 202 Anatomy & Physiology II w/lab	BIO 232 Human Anatomy & Physiology w/ lab
SCIN 142 General Chemistry I	INCHEM 100 Introduction to Chemistry <i>Credits for SCIN 142 will be accepted. This course meets the Chemistry requirement for the major.</i>
ENGN 109 Oral communication	IHCOMM 171 Public Speaking
PSYN 101 General Psychology	PSYCH 101 General Psychology
	Community Health Specialization Requirements
	HSLC 305 Epidemiology in Health Science
	Select one:
MTHN 106 Elementary Statistics	MATH 141 Introductory Statistics
MTHN 217 Probability and Statistics	MATH 142 Applied Statistics
	Behavior and Health Specialization Requirements
	Select one:
	HLSC 318 Nutrition throughout Lifespan
PSYN 205 Child Psychology	PSYC 311 Child and Adolescent Psychology
	PSYC 314 Adulthood and Aging
	HLSC 330 Health Psychology
PSYN 207 Social Psychology	PSYC 221 Social Psychology
	PSYC 242 Personality
	PSYC 253 Brain and Behavior
PSYN 210 Abnormal Psychology	PSYC 345 Abnormal Psychology

BS Health Science: Nutrition

As an option under the BS in Health Science, this nutrition option provides the basic academic preparation necessary to become a registered dietitian (RD). Certification as an RD is often mandatory for professional positions and requires completion of an approved postgraduate supervised practice program.

Typically, a student who successfully completes the ADA-approved curriculum, an ADA-accredited internship or pre-professional practice program, and the registration examination becomes qualified as a health professional

responsible for services in areas such as nutrition service-related management, clinical or community dietetics, education, consultation, private practice, and research.

By the fall 2012 semester, INHLSC 175 will replace all the following courses:

HLSC 115 Nutrition and Well-Being

HLSC 125 Nutrition and the Profession

HLSC 214 Nutrition Fundamentals

NCC	KSC
	KSC Major Requirements
	Core Courses
CHWN 101 Foundations of Health & Wellness	HLSC 101 Health and Wellness
	HLSC 285 Health in Society
	HLSC 380 Addiction: Theory, Research, and Practice
	HLSC 385 Behavior Change Facilitation
	HLSC 485 Health Promotion Practice
	Select one of the following:
	HLSC 494 Health Science Capstone
	HLSC 495 seminar: Health Science Research
	Nutrition Option
	<i>This option provides the basic academic preparation necessary to become a registered dietitian (RD). Students must have an overall GPA of 2.8. After completion of the following courses with an average of B or higher (3.0), students interested in pursuing the Nutrition option must submit an application for permanent admission to the Health Science Nutrition option:</i>
	HLSC 101 Health and Wellness
	HLSC 125 Nutrition and the Profession
	INCHEM 103 Fundamentals of Chemistry
	For transfer students, equivalent transferred courses may be considered if approved by the Admissions Committee.
	Required for admission consideration
CHWN 101 Foundations of Health & Wellness	HLSC 101 Health and Wellness
	HLSC 125 Nutrition and the Profession
SCIN 142 General Chemistry I	INCHEM 103 Fundamentals of Chemistry
	<i>Credits for SCIN 142 will be accepted. This course meets the Chemistry requirement for the major.</i>
	Nutrition Option requirements
	HLSC 125 Nutrition and the Profession
	HLSC 215 Nutrition Science and Application
	HLSC 216 Current Topics in Food Culture
	HLSC 310 Food Science
	HLSC 313 Foodservice Management
	HLSC 318 Nutrition Throughout the Lifespan
	HLSC 365 Exercise Science and Application
	HLSC 410 Experimental Foods
	HLSC 415 Nutritional Biochemistry

	HLSC 416 Medical Nutrition Therapy
	HLSC 473 Practicum: Nutrition
	Allied Discipline Requirements
SCIN 201 Anatomy & Physiology I w/ lab	BIO 230 Human Anatomy & Physiology I w/ lab
SCIN 202 Anatomy & Physiology II w/ lab	BIO 232 Human anatomy & Physiology II w/ lab
	BIO 240 Cell and Microbial Biology
SCIN 142 General Chemistry I w/ lab	INCHEM 103 Fundamentals of Chemistry w/ lab <i>Credits for SCIN 142 will be accepted. This course meets the Chemistry requirement for the major.</i>
SCIN 242 Organic Chemistry I w/lab	CHEM 220 Fundamental Organic Chemistry w/ lab
ENGN 109 Oral Communication	IHCOMM 171 Public Speaking
PSYN 101 General Psychology	PSYC 101 General Psychology

BS Health Science: Substance Abuse/Addictions

The Substance Abuse/Addictions option at Keene State College is an academic program with practical training in preparation for further studies in the field or entry-level employment in Substance Abuse/Addictions. The program provides students with a theoretical understanding of substance abuse and addictions and an introduction to counseling, treatment, and related practices.

Depending on the criteria of each state, the work in this Substance Abuse/Addictions program may be applied toward becoming a licensed or certified alcohol and drug abuse counselor or prevention specialist.

By the fall 2012 semester, INHLSC 175 will replace all the following courses:

- HLSC 115 Nutrition and Well-Being
- HLSC 125 Nutrition and the Profession
- HLSC 214 Nutrition Fundamentals

NCC	KSC
	KSC Major Requirements
	Core Courses
CHWN 101 Foundations of Health & Wellness	HLSC 101 Health and Wellness
	HLSC 285 Health in Society
	HLSC 380 Addiction: Theory, Research, and Practice
	HLSC 385 Behavior Change Facilitation
	HLSC 485 Health Promotion Practice
	Select one of the following:
	• HLSC 494 Health Science Capstone • HLSC 495 Seminar: Health Science Research
	Substance Abuse/Addictions Option
	Depending on the criteria of each state, the work in this Substance Abuse/Addictions program may be applied toward becoming a licensed or certified alcohol and drug abuse counselor or prevention specialist.
	Admission Criteria: Overall GPA of 2.5, major GPA

	of 2.5, and a grade C or higher in HLSC 101 Health and Wellness is required. For transfer students, equivalent transferred courses may be considered if approved by Health Science faculty.
	Substance Abuse/Addictions Requirements
PSYN 240 Alcohol and Drugs	HLSC 200 Alcohol and Other Drugs: The Fundamentals
SCIN 120 Nutrition	HLSC 214 Nutrition Fundamentals
	HLSC 365 Exercise Science and Application
	HLSC 382 Addiction Counseling and Management
	HLSC 386 Chemical Dependency Diagnosis and Treatment
	HLSC 492 Internship in Substance Abuse and Addictions
	Select one of the following:
	HLSC 489 Drug Abuse Prevention
	HLSC Advanced Drug Treatment Methods
	Allied Health Requirements
ENGN 109 Oral Communication	IHCOMM 171 Public Speaking
PSYN 101 General Psychology	PSYC 101 General Psychology
SCIN 201 Anatomy & Physiology I w/ lab	BIO 230 Human Anatomy & Physiology I w/ lab
SCIN 202 Anatomy & Physiology II w/ lab	BIO 232 Human Anatomy & Physiology II w/ lab
SCIN 142 General Chemistry I	INCHEM 100 Introduction to Chemistry <i>Credits for SCIN 142 will be accepted. This course meets the Chemistry requirement for the major.</i>

BS Mathematics-Physics (Engineering Route)

These programs prepare students to transfer to engineering schools after completing integrative studies requirements and foundation courses in mathematics, physics, chemistry, and computer science at Keene State College. Students are given personal advising and assistance in placement at the engineering school of their choice. The College at present has transfer agreements at the University of New Hampshire and Clarkson University, as well as individual transfer arrangements with engineering schools in New England and New York State. In 3+2 programs, students are encouraged to complete certain engineering science introductory courses at the engineering school during the summer following their sophomore year.

3+2 Program

Students spend three years at Keene State and two years in engineering school and receive a BS in Math/Physics from Keene State College and an appropriate BS in Engineering. Keene State has a formal 3+2 transfer agreement with Clarkson University in Potsdam, New York. Students who wish to continue receiving Financial Aid must postpone graduation from Keene State until all requirements are fulfilled at both institutions.

NCC	KSC
MTHN 210 Calculus I	MATH 151 Calculus I
MTHN 211 Calculus II	MATH 152 Calculus II
	MATH 251 Vector Calculus
MTHN 215 Linear Algebra AND	MATH 231 Linear Algebra and Differential Equations

MTHN 220 Elementary Differential Equations	
SCIN 231 Calculus-based Physics I	INPHYS 241 University Physics I
SCIN 242 Calculus-based Physics II	PHYS 242 University Physics II
	PHYS 260 Electronics
	PHYS electives (300 level or higher)
CPTN 202 Java Programming	CS 140 Computer Programming I

BS Mathematics - Physics

This interdisciplinary program provides sufficient groundwork in both mathematics and physics for employment in industry, the commercial sector, or further study in graduate school. Students who are interested in an engineering degree may elect this program, complete major requirements over three years, transfer to an engineering school of choice, and be awarded both the B.S. in Mathematics - Physics from Keene State and the appropriate engineering bachelor's degree.

NCC	KSC
	Major Requirements
MTHN 210 Calculus I	MATH 151 Calculus I
MTHN 211 Calculus II	MATH 152 Calculus II
	MATH 251 Vector Calculus
MTHN 215 Linear Algebra MTHN 220 Differential Equations	MATH 231 Linear Algebra And Differential Equations
	MATH 361 Differential Equations
SCIN 231 Calculus-based Physics I	INPHYS 241 University Physics I
SCIN 232 Calculus-based Physics II	PHYS 242 University Physics II
	PHYS 260 Electronics
	PHYS 342 Modern Physics
	PHYS electives (8 credits, 300 level or higher)
	Related Fields
CPTN 161 Introduction to Programming Using Visual Basic	CS 140 Computer Programming
SCIN 142 General Chemistry I	INCHEM 111 General Chemistry I
SCIN 143 General Chemistry II	CHEM 112 General Chemistry II

BS Physical Education: Exercise Science Option

Exercise Science is a multidisciplinary science-based program, which is fast growing and ever changing. It is intended for students who would like to pursue a career in exercise science, sports medicine, or allied health. Exercise Science is an area of study that prepares students for a variety of professions that include competitive sports, community recreation, health and wellness, rehabilitation, and medicine.

Transfer students may be eligible to apply for admission after one semester at KSC, but must have completed INCHEM 100 Introduction to Chemistry or an equivalent course and BIO 230 Human Anatomy and Physiology I or an equivalent course before applying. Criteria for admission are as follows:

Criteria for admission into Exercise Science degree program

- Academic progress: Overall GPA of 2.5, major GPA of 2.5 and a grade of C or higher in the following courses:

- HLSC 101 Health and Wellness
- PE 191 Standard First Aid/CPR
- PE 250 Concepts of Exercise Training
- Professional recommendations: Two recommendations for admission by KSC faculty (minimum one faculty member recommendation from outside of the Physical Education Department)
- Professional orientation: Documentation of progress in professional role modeling, professional writing, and professional experience

Retention standards

- Enrollment in PE 372, PE 472, and PE 492 requires the following standards:
 - Student must receive a C or better in all required Exercise Science option courses
 - Student must maintain a cumulative GPA of 2.5 and a major GPA of 2.5

NCC	KSC
	Allied Requirements
SCIN 141 Introduction to Chemistry	INCHEM 100 OR INCHEM 103 OR INCHEM 111 <i>Credits for SCIN 141 will be accepted. This course meets the Chemistry requirement for the major.</i>
	BIO 230 Human Anatomy & Physiology I
	BIO 232 Human Anatomy & Physiology II
PSYN 101 Introduction to Psychology	ISPSYC 100 Topics in Psychology
	Exercise Science Option Requirements
	HLSC 101 Health and Wellness
	PE 191 Standard First Aid/CPR (1 credit)
AHLN 123 Kinesiology	PE 200 Applied Kinesiology
	PE 201 Physiology of Exercise
	PE 250 Concepts of Exercise Training
	PE 232 Exercise Programming and Testing
	PE 335 Advanced Strength and Conditioning
	PE 344 Sports Nutrition
	PE 372 Practicum: Exercise Leadership
	PE 460 Experimental Design and Analysis in PE
	Select one: PE 472 Exercise Science Externship (4-12 cr) PE 492 Exercise Science Seminar
	Specialization requirements
	Complete one of the following areas:
	• Health Specialization
	HLSC 285 Health in Society
	Select one: HLSC 330 Health Psychology IPE 310 Psychosocial Aspects of Sport
	HLSC 431 Stress Management
	• Coaching Specialization
	PE 210 Introduction to Coaching
	Select one: MGT 260 Sports Management IPE 310 Psychosocial Aspects of Sport
	PE 371 Coaching Practicum

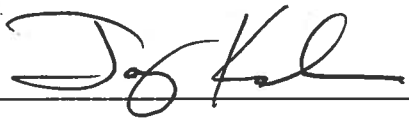
SCOPE OF THE AGREEMENT

This agreement and its Appendices, contains the entire Agreement of the parties and cancels and supersedes any previous understanding or Agreement, whether written or oral. All substantial changes or major modifications to this Agreement must be agreed to in writing between the parties.

Use of Agreement in Electronic Form: Both parties agree that they may: (a) convert this Agreement to electronic form, (b) retain it solely in such form, and (c) in the event of any dispute, provide it in such form or a copy from such form. The parties further agree that the Agreement in such form (or a copy), including the application of industry security standards for digital signatures, shall not be denied legal effect, validity, or enforceability due to its form and shall meet any requirement to provide an original.

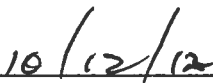
SIGNATURE SECTION

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective signatory officials thereunto duly authorized as of the day and year first above written.

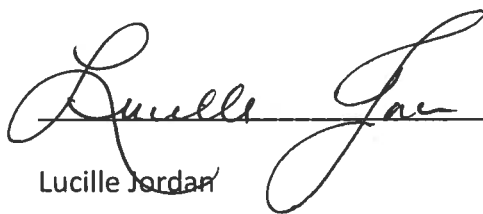


Jay Kahn

Interim President, Keene State College

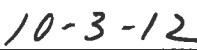


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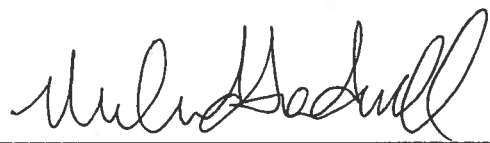


Lucille Jordan

President, Nashua Community College



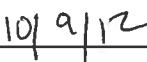
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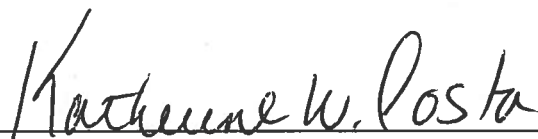
Melinda Treadwell

Provost and Vice President of Academic Affairs

Keene State College



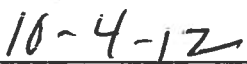
Date



Katherine Costa

Interim Associate Vice President Academic Affairs

Nashua Community College



Date