# Appalachian State University North Carolina School of Science and Math (NCSSM) Course Policy

(Amended 11/2025)

*** *A grade of "B -" or better is required for transfer of any individual course.* ***

| NCSSM Department | NCSSM Course | AppState Course Equivalency |
|---|---|---|
| Computer Science | CS4020 Web Development | C S 3440 (3 credits) |
| Computer Science | CS4040 Game Design and Simulation | C S 3463 (3 credits) |
| Computer Science | CS4060 Scientific Programming | C S 2435 (4 credits) |
| Computer Science | CS4200/MA4200 Cryptography | C S 3770 (3 credits) |
| Computer Science | CS4220 Databases | C S 3430 (3 credits) |
| Computer Science | CS4240 Procedural and Object-Oriented Programming | C S 1440 (4 credits) |
| Computer Science | CS4280 Advanced Java | C S 2440 (4 credits) |
| Computer Science | CS4300 Topics in CS - Human and Computer Interaction | C S 4570 (3 credits) |
| Computer Science | CS4320 Machine Learning | C S 4755 (3 credits) |
| Computer Science | CS4340 Data Structures with C | C S 3460 (3 credits) |
| Computer Science | CS4380 Algorithms | C S 3550 - C S Elective Credit (3 credits) |
| Engineering | EE4000 Mechanical Engineering | TEC Elective Credit (3 credits) |
| Engineering | EE4020 Electrical Engineering | TEC Elective Credit (3 credits) |
| Engineering | EE4040 Architecture | TEC Elective Credit (3 credits) |
| Engineering | EE4080 Biomedical Engineering | TEC Elective Credit (3 credits) |
| Engineering | EE4100 Introductory Robotics | TEC Elective Credit (3 credits) |
| Engineering | EE4140 Aerospace Engineering | TEC Elective Credit (3 credits) |
| Engineering | EE4160 Civil Engineering | TEC Elective Credit (3 credits) |
| Engineering | EE4180 Environmental Engineering | TEC Elective Credit (3 credits) |
| Engineering | EE4520 Biomedical Instrumentation | TEC Elective Credit (3 credits) |
| Engineering | EE4540 Statics | TEC 3738 (3 credits) |

| Engineering | EE4560 Circuits | PHY Elective Credit (3 credits) |
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| Humanities | AR4100 Drawing | ART 1003 (3 credits) |
| Humanities | AS4051 (formerly AS4050a) American Studies I | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | AS4051W (formerly AS4030a) Writing and American Studies I | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | AS4052 (formerly AS4050b) American Studies II | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | AS4052W (formerly AS4030b) Writing and American Studies II | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | CN4051 Advanced Chinese I | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | CN4052 Advanced Chinese II | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | CN4060 Explorations in Chinese for Heritage Speakers | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | CN4651 Readings in Chinese with Topics I | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | CN4652 Readings in Chinese with Topics II | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | CN4851 AP Chinese Language and Culture I | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | CN4852 AP Chinese Language and Culture II | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | DR4102 Theater Performance Workshop | THR 2300 (3 credits) |
| Humanities | EN4200 African Studies: Pre-Colonial Africa | HIS 2421 (3 credits) |
| Humanities | EN4210 African Studies: Modern Africa | HIS 2422 (3 credits) |
| Humanities | EN4203 African Studies: North Africa and the Middle East | HIS 3336 (3 credits) |
| Humanities | EN4211 East Asian Studies I | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | EN4212 East Asian Studies II | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | EN4241 Western European Cultural Studies I | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | EN4242 Western European Cultural Studies II | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | EN4251 Western Civilizations I: Wisdom, Revelation, Reason, and Doubt | HIS 1101 (3 credits) |
| Humanities | EN4252 Western Civilizations II: Wisdom, Revelation, Reason, and Doubt | HIS 1102 (3 credits) |

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| Humanities | EN4300 Creative Writing | ENG 3652 (3 credits) |
| Humanities | EN4400 AI in Science Fiction | ELE CRED with GenEd attributes of Humanities and Literary Studies (LS) (3 credits) |
| Humanities | EN4410 British Literature and Culture | ENG 2050 (3 credits) |
| Humanities | EN4430 Modern World Fiction | ENG 2040 (3 credits) |
| Humanities | EN4450 Shakespeare Now | ENG 2050 (3 credits) |
| Humanities | EN4470 STEM and the Stage | THR 2030 (3 credits) |
| Humanities | EN4490 Honors Ecocriticism | ELE CRED with GenEd attributes of Humanities and Literary Studies (LS) (3 credits) |
| Humanities | FR4051 Advanced French for Global Applications I | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | FR4052 Advanced French for Global Applications II | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | HH4450 Race, Leadership, and Ethics (online) | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | HU4200 Honors 21st Century Media Studies | COM 3300 (3 credits) |
| Humanities | HU4300 Whose America? Immigrant Experiences, 1910-present | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | HU4400 Black Studies | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | HU4405 American Indian and Indigenous Studies | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | HU4411 Critical Legal Studies | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | HU4435 Bioethics | PHL 3015 (3 credits) |
| Humanities | HU4450 Race, Leadership, and Ethics (residential) | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | HU4460 Topics in Humanities I (this is a sample Topics syllabus) | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | HU4461 Topics in Humanities II (this is a sample Topics syllabus) | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | HU4470 Topics in the Study of Religion | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | HU4490 Women's, Gender, and Sexuality Studies | GWS 2421 (3 credits) |
| Humanities | MU4300 Music Theory and Composition | MUS 1000 (3 credits) |
| Humanities | MU4310 AP Music Theory | See Appalachian's AP Policy |
| Humanities | MU4400 History of Western Music | MUS 2011 (3 credits) |
| Humanities | SP4051 Advanced Spanish for Global Applications I | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |

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| Humanities | SP4052 Advanced Spanish for Global Applications II | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | SP4651 Readings in Spanish with Topics I | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | SP4652 Readings in Spanish with Topics II | See Appalachian's AP Policy / Foreign Language Placement Test Procedure |
| Humanities | SS4000 International Relations (online) | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | SS4000 International Relations (residential) | ELE CRED w/ Gen Ed attribute of ICL (3 credits) |
| Humanities | SS4020 Sociology | SOC 1000 (3 credits) |
| Humanities | SS4030 Medical Sociology | SOC 2600 (3 credits) |
| Humanities | SS4040 Topics in Psychology | PSY 2530 (3 credits) |
| Humanities | SS4050 AP Psychology | See Appalachian's AP Policy |
| Humanities | SS4060 AP Microeconomics | See Appalachian's AP Policy |
| Humanities | SS4060 AP Microeconomics I (online) | See Appalachian's AP Policy |
| Humanities | SS4061 AP Microeconomics II (online) | See Appalachian's AP Policy |
| Humanities | SS4070 AP Macroeconomics | See Appalachian's AP Policy |
| Humanities | SS4070 AP Macroeconomics I (online) | See Appalachian's AP Policy |
| Humanities | SS4071 AP Macroeconomics II (online) | See Appalachian's AP Policy |
| Humanities | SS4081 Topics in History and Social Science I (this is a sample Topics syllabus) | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | SS4082 Topics in History and Social Science II (see sample syllabus for Topics I) | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Humanities | SS4083 Topics in History and Social Science III (see sample syllabus for Topics I) | ELE CRED with GenEd attribute of Humanities (3 credits) |
| Mathematics | MA4000 Precalculus & Modeling w/ Advanced Topics I | MAT 1020 (4 credits) |
| Mathematics | MA4002 Precalculus & Modeling w/ Advanced Topics II | MAT 1025 (4 credits) |
| Mathematics | MA4012 Calculus 1a/ MA4014/ MA4016 Calculus 1b | MAT 1110 (4 credits) |
| Mathematics | MA4030 / MA4032 | MAT1110 (4 credits) / MAT1120 (4 credits) |
| Mathematics | MA4042 Calculus I | MAT 1110 (4 credits) |
| Mathematics | MA4044/MA4046 Calculus II | MAT 1120 (4 credits) |
| Mathematics | MA4060 | MAT2130 (4 credits) |
| Mathematics | MA4066 Honors Multivariable Calculus with Applications II (online) | MAT 2130 (** if MA 4066 and MA 4064 are both successfully completed with grade of B- or above) (4 credits) |

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| Mathematics | MA4100/MA4102 | STT2820 (4 credits) |
| Science | BI4010 Anatomy & Physiology | E S 2030 (4 credits) |
| Science | BI4020 Ecology (*R*) | BIO 3302 (4 credits) |
| Science | BI4030 Environmental Science (*R*) | GES 1010 (3 credits) |
| Science | BI4040 Climate Change Biology (*M*) | BIO 1103 (4 credits) or BIO 3313 (4 credits) |
| Science | BI4110 Molecular Genetics (*R*) | BIO 2400 (3 credits) |
| Science | BI4120 Population Genetics (*M*) | BIO 2400 (3 credits) |
| Science | BI4130 Aquatic Ecology (*R*) | BIO 4240 (4 credits) |
| Science | BI4140 Molecular & Cellular Biol | BIO 2600 (3 credits) |
| Science | BI4160 Neuroscience (*R*) | BIO 3600 (4 credits) |
| Science | BI4210/BI4211 | BIO1801 (4 credits) / BIO1802 (4 credits) |
| Science | BI4200 Immunology (*R*) | BIO 4568 (4 credits) |
| Science | BI4921 Research in Biology II (*R*) | BIO 3500 Independent Study or BIO Elective in research area (3 credits) |
| Science | BI4922 Research in Biology III (*R*) | BIO 4500 Independent Study or BIO Elective in the research area (3 credits) |
| Science | CH4020/CH4120 | CHE1101 (3 credits) / CHE1110 (1 credit) / CHE1102 (3 credits) / CHE1120 (1 credit) |
| Science | CH4140 Environmental Chem (*R*) | CHE 2550 (3 credits) |
| Science | CH4270 Analytical Chemistry | CHE 2210 (3 credits) and CHE 2211 (1 credit) |
| Science | CH4290 Biochemistry (*R*) | CHE 4580 (3 credits) and CHE 4581 (1 credit) |
| Science | PH4000 Electromagnetism and Waves | PHY Elective Credit (3 credits) |
| Science | PH4020 Physics Core: Mechanics (Math Intensive) | PHY 1123 / 1113 (4 credits) |
| Science | PH4120 Physics Core: Electromagnetism and Waves (Math Intensive) | PHY 1124 / 1114 (4 credits) |
| Science | PH4130 Computational Physics | PY Elective Credit (3 credits) |
| Science | PH4180 Astrophysics | AST Elective Credit (3 credits) |
| Science | PH4220 Advanced Physics Problem Solving | PHY Elective Credit (3 credits) |
| Science | PH4240 AP Physics C: Mechanics | PHY 1170 / 1160 (5 credits) |
| Science | PH4241 AP Physics C: Electricity & Magnetism | PHY 1180 / 1161 (5 credits) |
| Science | PH4250 Modern Physics | PHY Elective Credit (3 credits) |

| Science | PH4260 Quantum Mechanics | PHY Elective Credit (3 credits) |
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| World Language | CN4351 Explorations in Chinese I | CHN 1040 (3 credits) |
| World Language | CN4352 Explorations in Chinese II | CHN 1050 (3 credits) |
| World Language | CN4951 Advanced Readings in Chinese with Topics I | CHN 2001 (3 credits) |
| World Language | CN4952 Advanced Readings in Chinese with Topics II | CHN 2003 (3 credits) |
| World Language | JA4151 Navigating in Japanese I | JPN 1010 (3 credits) |
| World Language | JA4152 Navigating in Japanese II | JPN 1020 (3 credits) |
| World Language | CN4151 Navigating in Chinese I | CHN 1010 (3 credits) |
| World Language | CN4152 Navigating in Chinese II | CHN 1020 (3 credits) |
| World Language | CN4161 Navigating in Chinese + Global Understanding I | CHN 1010 (3 credits) |
| World Language | CN4162 Navigating in Chinese + Global Understanding II | CHN 1020 (3 credits) |
| World Language | FR4151 Navigating in French I | FRE 1040 (3 credits) |
| World Language | FR4152 Navigating in French II | FRE 1050 (3 credits) |
| World Language | FR4510 Modern French Readings and Media | FRE 2025 (3 credits) |
| World Language | SP4151 Navigating in Spanish I | SNH 1010 (3 credits) |
| World Language | SP4152 Navigating in Spanish II | SNH 1020 (3 credits) |
| World Language | SP4300 Explorations in Spanish: Environmental Studies | SNH 2530 Special Topics (3 credits) |
| World Language | SP4500 Spanish for Heritage Speakers | SNH 2006 (3 credits) |
| World Language | SP4520 Advanced Spanish: Sports and Culture in the Hispanosphere | SNH 2530 Special Topics (3 credits) |
| World Language | SP4530 Advanced Spanish: The Gothic and Supernatural in the Hispanosphere | SNH 2530 Special Topics (3 credits) |
| World Language | SP4540 Advanced Spanish: Afro-Latino and Caribbean Studies | SNH 2530 Special Topics (3 credits) |