

Essential Education requirements

- Students must complete three main components of Essential Education (First-Year Experience, Distribution or Minor Pathway, and Activities for Well-being and Success) with the credit distributions as shown below. A minimum of 37 credits is required to complete these requirements.
- Up to five Essential Education requirements and the Michigan Tech Seminar may be shared (double-counted) with major requirements. Work with your advisor to determine which major requirements may satisfy Essential Education requirements.
- Some courses are on more than one list, but each course can satisfy only one Essential Education requirement.
- Students may choose between an Essential Education minor or the Distribution Pathway. The list of Essential Education minors can be found [here](#).
- Lists of courses for each requirement can be found on the [Essential Education](#) page.

First-Year Experience (16 credits)

- Michigan Tech Seminar (1)
- Math (3)
- Natural and Physical Science (3)
- STEM (3)
- Composition (3)
- Foundations of the Human World (3)

Distribution Pathway (18 credits)

- Communication Intensive (3)
- Intercultural Competency (3)
- Arts and Culture (3)
- STEM (3)
- SHAPE (3)
- Essential Education Experience (3)

Activities for Well-being and Success (3 credits)



Math (3)

| | | |
|---------|--|---|
| BUS2100 | Business Statistics | 3 |
| BUS2300 | Quantitative Problem Solving | 3 |
| BUS3000 | Introduction to Business Analytics | 3 |
| EC4100 | Mathematical Economics | 3 |
| EC4200 | Econometrics | 3 |
| MA1020 | Quantitative Literacy | 4 |
| MA1031 | College Algebra II with Trigonometry | 3 |
| MA1032 | Precalculus | 4 |
| MA1135 | Calculus for Life Sciences | 4 |
| MA1160 | Calculus with Technology I | 4 |
| MA1161 | Calculus Plus with Technology | 5 |
| MA2160 | Calculus with Technology II | 3 |
| MA2720 | Statistical Methods | 4 |
| MIS4400 | Business Intelligence and Analytics | 3 |
| PSY2720 | Statistics for the Behavioral Sciences | 4 |
| SS2720 | Statistics for Social Sciences | 4 |
| SS4010 | Applied Statistics for Social Sciences | 3 |

Natural and Physical Science (3)

| | | |
|--------|--|---|
| BL1100 | General Biology I | 3 |
| BL1200 | General Biology II | 3 |
| BL1400 | Principles of Biology | 3 |
| BL2010 | Anatomy & Physiology I | 3 |
| BL2160 | Botany | 4 |
| BL2170 | Zoology | 4 |
| BL2940 | Human Nutrition | 3 |
| BL4090 | Tropical Island Biology | 2 |
| CH1000 | Introductory Chemistry | 3 |
| CH1150 | University Chemistry I | 3 |
| CH1160 | University Chemistry II | 3 |
| CH2590 | The Chemistry of Color and Art Materials | 3 |
| FW1035 | Wood Anatomy and Properties | 3 |
| FW2060 | Fundamentals of Environmental Sustainability | 3 |
| FW2081 | Introduction to Circular Economy | 3 |
| FW3330 | Soil Science | 4 |
| FW3610 | Ornithology | 4 |
| FW4120 | Tree Physiology | 3 |
| FW4128 | Conservation Genetics | 3 |
| FW4240 | Mammalogy | 4 |
| GE2000 | Understanding the Earth | 3 |
| GE2300 | Mineral Science | 3 |
| GE3320 | Earth History | 3 |
| GE3850 | Geohydrology | 3 |
| GE4150 | Natural Hazards | 3 |
| PH1090 | The Physics Behind Music | 3 |
| PH1110 | College Physics I | 4 |
| PH1140 | Applied College Physics I | 4 |
| PH1160 | Honors Physics I-Mechanics | 5 |
| PH1210 | College Physics II | 3 |
| PH1600 | Introductory Astronomy | 3 |
| PH2100 | University Physics I-Mechanics | 3 |
| SS3250 | Biological Anthropology | 3 |

STEM (6)

| | | |
|----------|---|---|
| All | Math list courses | |
| All | Natural and Physical Science list courses | |
| ACC2000 | Accounting Principles I | 3 |
| ACC2100 | Accounting Principles II | 3 |
| ACC3000 | Intermediate Accounting I | 3 |
| ACC3500 | Managerial Cost Accounting | 3 |
| BL2000 | Biology of Movement and Meditation | 3 |
| BL3001 | Emergency Medical Technician I | 3 |
| CS1111 | Programming in C/C++ | 3 |
| CS1121 | Introduction to Programming I | 3 |
| CS1122 | Introduction to Programming II | 3 |
| CS1131 | Accelerated Introduction to Programming | 5 |
| DATA1200 | Data Science with Python | 3 |
| DATA2201 | Foundations of Data Science | 3 |
| EET1121 | Circuits I | 4 |
| EET1411 | Basic Electronics | 4 |
| ENG1102 | Engineering Modeling and Design | 3 |
| FIN4000 | Investment Analysis | 3 |
| FIN4200 | Derivatives and Financial Engineering | 3 |
| FIN4500 | Risk Management | 3 |
| FIN4600 | FinTech Foundations | 3 |
| FIN4700 | Global Finance | 3 |
| FW3075 | Introduction to Biotechnology | 3 |
| GE1200 | Intro to Data Sci Earth Resources | 1 |
| GE2010 | Intro to GIS | 3 |
| KIP1500 | Foundations of Kinesiology | 3 |
| KIP3100 | Exercise Assessment and Prescription | 3 |
| MIS2000 | IS/IT Management | 3 |
| MIS2100 | Introduction to Business Programming | 3 |
| MIS3100 | Business Database Management | 3 |
| MIS3200 | Systems Analysis and Design | 3 |
| MIS3500 | User-Centered Design | 3 |
| MIS4000 | Emerging Technologies | 3 |
| MIS4200 | Management of Cyber Security | 3 |
| OSM3000 | Operations & Supply Chain Management | 3 |
| OSM3600 | Procurement & Supply Management | 3 |
| PSY3060 | Brain and Behavior | 3 |
| SAT1610 | Computer and OS Architecture | 3 |
| SAT2711 | Linux Fundamentals | 3 |
| SND1150 | Sound Technology | 3 |
| SND4121 | Transducer Theory Lab | 3 |
| SS2050 | Fundamentals of GIS | 3 |
| SS3221 | Archaeological Sciences | 3 |
| SS3510 | History of American Technology | 3 |
| SS3511 | History of Science in America | 3 |
| SS3800 | Energy Policy and Technology | 3 |



Foundations of the Human World (3)

| | | |
|----------|---|-----|
| ART1000 | Art Appreciation | 3 |
| BUS1100 | Introduction to Business | 3 |
| EC2001 | Principles of Economics | 3 |
| FIN2400 | Financial Literacy | 3 |
| HF2000 | Introduction to Engineering Psychology | 3 |
| HU2130 | Introduction to Rhetoric | 3 |
| HU2200 | Introduction to World Cultures | 3 |
| HU2241 | Level I-A Less Commonly Taught Languages | var |
| HU2242 | Level I-B Less Commonly Taught Languages | var |
| HU2271 | Level I-A French Language & Culture | 3 |
| HU2272 | Level I-B French Language & Culture | 3 |
| HU2273 | Transitional Level I French Language & Culture | 3 |
| HU2281 | Level I-A German Language & Culture | 3 |
| HU2282 | Level I-B German Language & Culture | 3 |
| HU2291 | Level I-A Spanish Language & Culture | 3 |
| HU2292 | Level I-B Spanish Language & Culture | 3 |
| HU2293 | Transitional Level I Spanish Language & Culture | 3 |
| HU2324 | Introduction to Film | 3 |
| HU2400 | Conversations on Culture and Diversity | 3 |
| HU2503 | Introduction to Literature | 3 |
| HU2505 | Humanities, Science, and Technology | 3 |
| HU2700 | Introduction to Philosophy | 3 |
| HU2701 | Logical and Critical Thinking | 3 |
| HU2702 | Ethical Theory and Moral Problems | 3 |
| HU2820 | Communication and Culture | 3 |
| HU2825 | Technology and Media | 3 |
| MUS1000 | Music Appreciation | 3 |
| MUS1140 | Popular Songwriting | 3 |
| PSY2000 | Introduction to Psychology | 3 |
| SAT1700 | Cyber Ethics | 3 |
| SND1000 | Sound in Art and Science | 3 |
| SS1500 | Introduction to History | 3 |
| SS2100 | Introduction to Cultural Anthropology | 3 |
| SS2200 | Introduction to Archaeology | 3 |
| SS2210 | Community Development and Planning | 3 |
| SS2300 | Environment and Society | 3 |
| SS2400 | Introduction to Human Geography | 3 |
| SS2450 | Introduction to Sustainable Tourism | 3 |
| SS2500 | United States History to 1877 | 3 |
| SS2501 | US History Since 1877 | 3 |
| SS2502 | European History to 1650 | 3 |
| SS2503 | European History Since 1650 | 3 |
| SS2504 | World History to 1500 | 3 |
| SS2505 | World History Since 1500 | 3 |
| SS2600 | American Government and Politics | 3 |
| SS2610 | Introduction to Law and Society | 3 |
| SS2625 | Introduction to American Foreign Policy | 3 |
| SS2635 | Comparative Politics | 3 |
| SS2700 | Introduction to Sociology | 3 |
| SS2750 | Racial Inequality | 3 |
| THEA1000 | Theatre Appreciation | 3 |
| THEA1140 | Foundations of Entertainment Design | 3 |
| THEA1400 | Acting I | 3 |
| UN 1025 | Global Issues | 3 |

Composition (3)

| | | |
|--------|-------------|---|
| UN1015 | Composition | 3 |
|--------|-------------|---|

Communication Intensive (3)

| | | |
|----------|--|---|
| AF3001 | Leading People and Effective Communication | 3 |
| CH3124 | Communication for the Chemical Sciences | 3 |
| HU2500 | Writing About Literature | 3 |
| HU2510 | Intro to Creative Writing | 3 |
| HU2810 | Research & Writing in Communication | 3 |
| HU2830 | Public Speaking & Multimedia | 3 |
| HU2840 | Interpersonal Communication and Technology | 3 |
| HU3015 | Advanced Composition | 3 |
| HU3105 | Writing about Numbers | 3 |
| HU3120 | Technical and Professional Communication | 3 |
| HU3130 | Rhetoric of Science and Technology | 3 |
| HU3140 | Rhetoric of Health and Medicine | 3 |
| HU3151 | The Rhetoric of Everyday Texts | 3 |
| HU3160 | Rhetoric and Culture of Games | 3 |
| HU3283 | German Composition and Conversation | 3 |
| HU3293 | Level II-C Spanish Composition & Conversation | 3 |
| HU3514 | Workshop Creative Nonfiction | 3 |
| HU3515 | Workshop in Poetry | 3 |
| HU3516 | Workshop in Fiction | 3 |
| HU3517 | Literary Theory and Criticism | 3 |
| HU3518 | Workshop in Sci Fi Writing | 3 |
| HU3519 | Workshop in Nature Writing | 3 |
| HU3606 | Editing | 3 |
| HU3692 | Writing for Scientific Audiences | 3 |
| HU3693 | Science Writing for Public | 3 |
| HU3694 | Grant Writing | 3 |
| HU3698 | Writing for Health/Medical Audiences | 3 |
| HU3699 | Health/Medical Writing for Public Audiences | 3 |
| HU3825 | Environmental Communication | 3 |
| HU3832 | Virtual Encounters | 3 |
| HU3845 | Human-Machine Communication | 3 |
| HU4625 | Risk Communication | 3 |
| MA4945 | History of Mathematics | 3 |
| SND4120 | Transducer Theory | 3 |
| SS3240 | Reading the Landscape | 3 |
| SS3420 | Imaginary Worlds: Geographies of Science Fiction and Fantasy | 3 |
| SS3501 | Making History | 3 |
| SS3520 | U.S. Environmental History | 3 |
| SS3535 | History of Privacy | 3 |
| SS3552 | Renaissance & Reformation | 3 |
| SS3950 | Topics in American History | 3 |
| SS3951 | Topics in European History | 3 |
| SS3952 | Topics in World History | 3 |
| SS4001 | History of Social Thought | 3 |
| SS4040 | Civic Communications | 3 |
| SS4540 | Global Environmental History | 3 |
| SS4550 | History of Technology | 3 |
| THEA1170 | Voice and Movement | 3 |
| THEA2310 | Drafting for the Entertainment Industry | 3 |
| THEA2470 | Voice Acting Fundamentals | 3 |
| THEA3320 | Lighting Design | 3 |



Intercultural Competency (3)

| | | |
|---------|--|---|
| ART3180 | Color and Creativity: Exploring the Power of Color | 3 |
| ART3420 | World Sculpture Traditions | 3 |
| BL3970 | Current Health Issues | 3 |
| EC3100 | International Economics | 3 |
| EC4710 | Labor/Human Resource Economics | 3 |
| FW4111 | Indigenous Natural Resources Management | 3 |
| HU3135 | Power and Bias in Technology Design | 3 |
| HU3261 | Communicating Across Cultures | 3 |
| HU3262 | Topics in Francophone Cultures | 3 |
| HU3263 | Topics in German-Speaking Culture | 3 |
| HU3264 | Topics in Spanish-Speaking Culture | 3 |
| HU3284 | Level III German Literature & Culture | 3 |
| HU3294 | Hispanic Literatures and Culture | 3 |
| HU3296 | Survey of Hispanic Literatures and Cultures | 3 |
| HU3326 | Topics in World Cinema | 3 |
| HU3400 | Topics in Diversity Studies | 3 |
| HU3401 | Gender and Culture | 3 |
| HU3502 | Mythology | 3 |
| HU3507 | Cultural Traditions in Literature | 3 |
| HU3508 | Literature and the Environment | 3 |
| HU3545 | Literature across Borders | 3 |
| HU3554 | Science Fiction | 3 |
| HU3710 | Engineering Ethics | 3 |
| HU3800 | Media and Society | 3 |
| HU3830 | Creativity, Culture, & Change | 3 |
| HU3850 | Automated Culture: Critical Approaches to AI | 3 |
| HU3855 | Power, Activism, and Technology | 3 |
| HU3860 | Cultural Theory and Popular Culture | 3 |
| HU3871 | Media Theory | 3 |
| HU3950 | Sound and Culture | 3 |
| HU4271 | Modern Language Seminar I-French | 3 |
| HU4272 | Modern Language Seminar II-French | 3 |
| HU4281 | Modern Language Seminar I-German | 3 |
| HU4282 | Modern Language Seminar II-German | 3 |
| HU4283 | Modern Language Seminar III-German | 3 |
| HU4291 | Modern Language Seminar I-Spanish | 3 |
| HU4292 | Modern Language Seminar II-Spanish | 3 |
| HU4293 | Modern Language Seminar III-Spanish | 3 |
| HU4725 | Existentialism and Phenomenology | 3 |
| MGT3000 | Organizational Behavior | 3 |
| MGT4100 | International Management | 3 |
| MKT4300 | Global Marketing | 3 |
| PSY3340 | Psychology of Race | 3 |
| PSY3720 | Social Psychology | 3 |
| PSY4340 | Culture and Cognition | 3 |
| SS3105 | Native American and Indigenous Communities | 3 |
| SS3110 | Food Systems and Sustainability | 3 |
| SS3225 | Capitalism and the Modern World | 3 |
| SS3260 | Latin American Cultural History | 3 |
| SS3542 | History of Detroit | 3 |
| SS3612 | International Relations | 3 |

Intercultural Competency continued

| | | |
|----------|--|---|
| SS3640 | Selected Topics in Cyber-Law | 3 |
| SS3660 | Constitutional Law | 3 |
| SS3661 | Civil Rights & Civil Liberties | 3 |
| SS3665 | Crime, Incarceration, and Policy | 3 |
| SS3750 | Social Inequality | 3 |
| SS3805 | Environmental Justice | 3 |
| SS3811 | Energy Security and Justice | 3 |
| SS3920 | Topics in Anthropology/Archaeology | 3 |
| SS3961 | Preparing for Cross-Cultural Immersion Experiences | 3 |
| SS4211 | Ethnographic Methods | 3 |
| SS4420 | Memory and Heritage | 3 |
| SS4450 | Sustainable Tourism and Planning | 3 |
| SS4710 | Geographies of Migrant and National Communities | 3 |
| THEA3201 | Theatre History | 3 |
| THEA3230 | Costume History | 3 |
| THEA3330 | Costume Design | 3 |

Seminar (1)

| | | |
|----------|---|---|
| BL1580 | First-Year Experience in Biological Sciences | 1 |
| BL1600 | First-Year Experience in MLS | 1 |
| CH1134 | Professional Development Seminar for Chemists | 1 |
| CMG1000 | Introduction to Construction Management | 2 |
| CS1000 | Explorations in Computing | 1 |
| DATA1000 | Explorations in Data Science | 1 |
| ENG1101 | Engineering Analysis and Problem Solving | 3 |
| FW1050 | Natural Resource Professional | 2 |
| GE1100 | Geo-Orientation | 1 |
| HF1999 | Introduction to HF Major | 1 |
| HU1000 | Introduction to Humanities | 1 |
| KIP1000 | Introduction to Exercise Science | 1 |
| MA1910 | Exploring Symmetry Groups | 3 |
| MA1920 | Exploring Knots and Surfaces | 3 |
| MA1930 | Exploring Number Theory | 3 |
| MA1940 | Exploring Non-Euclidean Geometry | 3 |
| NUR1100 | Introduction to Nursing | 2 |
| PH1162 | Introduction to Physics Seminar | 1 |
| PSY1999 | Introduction to the Psychology Major | 1 |
| SAT1000 | Introduction to Applied Computing | 1 |
| SS1001 | Orientation to the Social Sciences | 1 |
| THEA1001 | First Year Arts Seminar | 1 |
| UN1013 | Michigan Tech Seminar | 1 |
| UN2013 | Michigan Tech Transfer Seminar | 1 |



Arts and Culture (3)

| | | |
|---------|---|-----|
| ART1100 | Drawing I | 3 |
| ART1110 | Art + Design Studio | 3 |
| ART2100 | Drawing II | 3 |
| ART2110 | Art on Site | 3 |
| ART2140 | Ceramics I | 3 |
| ART2145 | Beginning Wheel Throwing | 3 |
| ART2170 | Fiber Arts | 3 |
| ART2195 | Art and Flora | 3 |
| ART2350 | Scenic Art & Scenic Illustration | 3 |
| ART2950 | Creative Campus: Local Arts Immersion | 3 |
| ART3130 | Creative Drawing II | 3 |
| ART3140 | Creative Ceramics | 3 |
| ART3145 | Ceramic Sculpture | 3 |
| ART3410 | Contemporary Sculpture Studio | 3 |
| ART3850 | Special Topics: Art | var |
| ART4410 | Advanced Sculpture Studio | 3 |
| ART4440 | Advanced Ceramics | 3 |
| ART4450 | Advanced Creative Drawing & Painting | 3 |
| HU2501 | American Experience in Literature | 3 |
| HU2538 | British Experience in Literature | 3 |
| HU2548 | Young Adult Literature | 3 |
| HU2633 | Fundamentals of Digital Imaging | 3 |
| HU2645 | Graphic and Information Design | 3 |
| HU3241 | Level II-A Less Commonly Taught Languages | var |
| HU3242 | Level II-B Less Commonly Taught Languages | var |
| HU3281 | Level II-A German Language & Culture | 3 |
| HU3282 | Level II-B German Language & Culture | 3 |
| HU3285 | Level III German Film & Media | 3 |
| HU3291 | Level II-A Spanish Language & Culture | 3 |
| HU3292 | Level II-B Spanish Language & Culture | 3 |
| HU3327 | Film Style and Genre | 3 |
| HU3503 | Special Topics in Literature and Culture | 3 |
| HU3504 | Studies in the Novel | 3 |
| HU3505 | Special Topics Literary Forms | 3 |
| HU3506 | Major Authors | 3 |
| HU3509 | Studies in Drama | 3 |
| HU3513 | Shakespeare | 3 |
| HU3557 | Literature and Science | 3 |
| HU3630 | Publication and Information Management | 3 |
| HU3700 | Philosophy of Science | 3 |
| HU3701 | Philosophy of Technology | 3 |
| HU3702 | Philosophy of Religion | 3 |
| HU3704 | Ethics of Artificial Intelligence | 3 |
| HU3705 | Media and Communication Ethics | 3 |
| HU3711 | Biomedical Ethics | 3 |
| HU3802 | Media and Globalization | 3 |
| HU3852 | See and Be Seen: Data, Surveillance & Society | 3 |
| HU3872 | Machines in the Mist: Visuality and Culture | 3 |
| HU3882 | Media Industries | 3 |
| HU4327 | Multimedia Storytelling | 3 |
| HU4370 | Documentary Workshop | 3 |
| HU4642 | Advanced Topics in Media | 3 |
| HU4701 | Political Philosophy | 3 |
| MUS1100 | Western Music Fundamentals | 3 |
| MUS1580 | Group Voice | 3 |

Arts and Culture continued

| | | |
|----------|---|-----|
| MUS2000 | History of Classical Music | 3 |
| MUS2001 | Film Music | 3 |
| MUS2020 | History of Rock | 3 |
| MUS2030 | History of Jazz | 3 |
| MUS2040 | Music and Tradition | 3 |
| MUS2103 | Jazz Theory and Aural Skills | 3 |
| MUS3020 | Beatles and Beach Boys | 3 |
| MUS3130 | Jazz Improvisation | 3 |
| MUS3210 | Electronic Music: History and Practice | 3 |
| MUS3850 | Special Topics: Music | var |
| MUS4130 | Jazz Arranging | 3 |
| PSY2082 | Psychology of Friendship | 3 |
| PSY2083 | Psychology of Happiness | 3 |
| PSY2600 | Death and Dying | 3 |
| PSY3880 | Psychology of Social Media | 3 |
| SND1101 | Introduction to Music Mixing | 3 |
| SND1102 | Intro to Audio Production | 3 |
| SND3850 | Special Topics: Sound | var |
| SS2510 | Gender and the Past | 3 |
| SS3513 | History of Making Things: Craft and Industry in America | 3 |
| SS3530 | The Automobile in America | 3 |
| SS3540 | History of Michigan | 3 |
| SS3580 | Technology and Society in History | 3 |
| SS3581 | History of Science | 3 |
| SS4200 | Environmental Anthropology | 3 |
| SS4220 | Archaeological Thought in Society | 3 |
| SS4552 | Historical Archaeology | 3 |
| SS4553 | Material Culture Studies | 3 |
| SS4600 | Indus & Historical Archaeology | 3 |
| SS4990 | Directed Study in Anthropology | var |
| THEA3400 | Acting II | 3 |
| THEA3850 | Special Topics: Theatre | var |
| THEA4400 | Acting: Shakespeare | 3 |
| THEA4402 | Musical Theatre Performance | 3 |



SHAPE Elective (3)

| | | |
|---------|---|-----|
| All | Foundations Courses list courses | |
| All | Arts and Culture Courses list courses | |
| All | Communication Intensive Courses list courses | |
| All | Intercultural Competency Courses list courses | |
| AF1340 | Field Training | 1 |
| AF2001 | Team and Leadership Fundamentals I | 1 |
| AF2002 | Team and Leadership Fundamentals II | 1 |
| AF3001 | Leading People and Effective Communication I | 3 |
| AF3002 | Leading People and Effective Communication II | 3 |
| AF4001 | Nat'l Security/Leadership Resp/Commissioning Prep I | 3 |
| AF4002 | Nat'l Security/Leadership Resp/Commissioning Prep II | 3 |
| AR2001 | Leadership and Ethics w/Lab | 2 |
| AR2002 | Army Doctrine and Decision Making w/Lab | 2 |
| BL2001 | Valuing the Great Lakes | 3 |
| BL3090 | Spirituality in Healthcare | 3 |
| BUS2200 | Business Law | 3 |
| CS3000 | Ethical and Social Aspects of Computing | 3 |
| EC3002 | Microeconomic Theory | 3 |
| EC3003 | Macroeconomic Theory | 3 |
| EC3300 | Industrial Organization | 3 |
| EC3400 | Economic Decision Analysis | 3 |
| EC4050 | Game Theory/Strategic Behavior | 3 |
| EC4400 | Banking and Financial Institutions | 3 |
| EC4500 | Public Sector Economics | 3 |
| EC4620 | Energy Economics | 3 |
| EC4630 | Mineral Industry Economics | 3 |
| EC4640 | Natural Resource Economics | 3 |
| EC4650 | Environmental Economics | 3 |
| ENG2060 | Facilitating Group Learning | 1 |
| ENG3060 | Developing Mentoring Skills | 1 |
| ENG4060 | Leadership in Group Environments | 1 |
| ENT2961 | Teaming in the Enterprise | 2 |
| ENT2962 | Communication Contexts | 1 |
| ENT3958 | Ethics in Engineering | 1 |
| FIN4300 | Personal Financial Planning | 3 |
| FW3313 | Sustainable Science | 3 |
| GE2100 | Environmental Geology | 3 |
| HF3850 | Human Factors | 3 |
| HF4015 | Cognitive Task Analysis | 3 |
| HON2150 | Know Yourself | 1 |
| HON3150 | Pavlis Seminar II | 1 |
| HON3350 | Navigate Your World | 3 |
| HON4150 | Pavlis Seminar III | 1 |
| HON4350 | Tell Your Story | 3 |
| HU2600 | Introduction to Writing in Science & Technology | 3 |
| HU2646 | Writing with Web Technologies | 3 |
| HU3121 | Advanced Technical Writing | 3 |
| HU3295 | Level III Advanced Spanish for Literacies | 3 |
| HU4628 | Usability Evaluation and Testing | 3 |
| HU4635 | Principles of User Experience Design | 3 |
| HU4890 | Topics in Communication | 3 |
| IS2002 | International Studies in situ - Social & Behavioral Science | var |
| KIP2600 | Introduction to Public Health | 3 |
| KIP3700 | Lifetime Fitness | 3 |
| MGT2000 | Team Dynamics | 3 |

SHAPE Elective continued

| | | |
|----------|--|-----|
| MGT3100 | Leadership Development | 3 |
| MGT3650 | Intellectual Property Management | 3 |
| MGT3800 | Entrepreneurship | 3 |
| MGT4300 | Developing Entrepreneurial Ventures | 3 |
| MGT4600 | Management of Technology and Innovation | 3 |
| MGT4650 | Commercialization of Advanced Technologies | 3 |
| MKT3000 | Principles of Marketing | 3 |
| MKT3200 | Consumer Behavior and Culture | 3 |
| MKT4100 | Sales and Sales Management | 3 |
| PSY2010 | Wellness and Resilience for College and Beyond | 3 |
| PSY2080 | Special Topics in Psychology | var |
| PSY2081 | Psychology of Video Games | 3 |
| PSY2110 | Educational Psychology | 3 |
| PSY2400 | Health Psychology | 3 |
| PSY2800 | Critical Thinking for Social and Behavioral Sciences | 3 |
| PSY2900 | An Introduction to Restorative Practices | 3 |
| PSY3010 | Theories of Personality | 3 |
| PSY3030 | Abnormal Psychology | 3 |
| PSY3200 | Motivation and Emotion | 3 |
| PSY3400 | Developmental Psychology | 3 |
| PSY3600 | Cognitive Psychology | 3 |
| PSY3700 | Industrial/Organizational Psychology | 3 |
| PSY3800 | Environmental Psychology | 3 |
| PSY4080 | Topics in Psychology | var |
| PSY4750 | Judgment and Decision Making | 3 |
| SS2001 | Intro to Social Science Research | 3 |
| SS2620 | Introduction to Public Policy | 3 |
| SS3200 | Archaeology of the Modern World | 3 |
| SS3230 | Archaeology of Industry | 3 |
| SS3280 | Anthropology of Energy | 3 |
| SS3315 | Population and Environment | 3 |
| SS3505 | Military History of the U.S. | 3 |
| SS3515 | History of American Architecture | 3 |
| SS3621 | Non-Profit Management | 3 |
| SS3625 | Policy Analysis | 3 |
| SS3630 | Environmental Policy & Politics | 3 |
| SS3650 | Intellectual Property Management | 3 |
| SS3755 | Sustainability and the Private Sector | 3 |
| SS3801 | Science, Technology, & Society | 3 |
| SS3815 | Energy and Society | 3 |
| SS3990 | Topics in the Social Sciences | var |
| SS4009 | Survey Methods | 3 |
| SS4120 | Sustainable Development | 3 |
| SS4230 | Archaeological Analysis and Interpretation | 3 |
| SS4313 | Sustainability Science | 3 |
| SS4390 | Seminar in Sustainability | 3 |
| SS4400 | Environmental Sociology | 3 |
| SS4554 | Global Industrial History | 3 |
| SS4995 | Topics in the Social Sciences | var |
| THEA1110 | Entertainment Technology I | 3 |
| THEA1120 | Lighting Technology I | 3 |
| THEA1130 | Costume Technology I | 3 |
| THEA3340 | Scenic Design | 3 |



Essential Education Experience (3)

| | | |
|----------|---|-----|
| ART3190 | Art, Nature, and Contemplative Photography | 3 |
| ART3900 | Study Away: Regional Arts Immersion | var |
| ART3950 | International Arts Immersion | var |
| ENG4070 | Peer Mentoring Practicum | 3 |
| FW3114 | Reading the Forest | 3 |
| FW3760 | Human Dimensions in Natural Resources Stewardship | 3 |
| HON4070 | Leadership Practicum | var |
| HU3000 | Humanities Experience: Community-engaged learning | 3 |
| HU3289 | HU Experience: German Abroad | 3 |
| HU3298 | Experience Spanish Language & Culture thru Teaching | 3 |
| HU3299 | Exploring a Hispanic City by Analyzing its Film Production | 3 |
| HU3370 | The Documentary Experience | 3 |
| HU3621 | HU Experience in Journalism | 3 |
| HU3703 | HU Experience in Environmental Philosophy | 3 |
| HU3810 | HU Experience in Technology & Critical Making | 3 |
| HU4041 | HU Experience in Communication for Sustainability | 3 |
| IS3002 | International Studies in situ - Social & Behavioral Science | var |
| MUS3700 | Visual and Performing Arts Tour | var |
| SS3090 | UPERSS | var |
| SS3210 | Field Archaeology | var |
| SS3541 | The Copper Country | 3 |
| SS3626 | STEM Policy Lab at MTU | 3 |
| SS3760 | Human Dimensions in Natural Resources Stewardship | 3 |
| SS3913 | Sustainable Living Practicum | var |
| SS3915 | Experiencing Museums | 3 |
| SS3960 | Cultural Immersion | var |
| SS4050 | Advanced GIS Methods | 3 |
| SS4530 | Deindustrialization and the Urban Environment | 3 |
| SS4551 | Industrial Communities | 3 |
| SS4700 | Communities and Research | 3 |
| SS4915 | Effective Social Action | 3 |
| SS4920 | Internship Experience | var |
| SS4921 | Washington Experience Seminar | var |
| SS4922 | Washington Experience Topics | var |
| THEA4190 | Directing for Theatre | 3 |
| UN3013 | Interdisciplinary Experience | var |



Activities for Well-Being and Success (3)

| | | |
|---------|--|-----|
| AF1120 | Physical Conditioning | 1 |
| AR1001 | Introduction to the Army w/Lab | 1 |
| AR1003 | Foundations of Leadership w/Lab | 1 |
| AR2068 | Fall Military Physical Conditioning | 1 |
| AR2069 | Spring Military Physical Conditioning | 1 |
| AR3068 | Physical Training Leadership I | 1 |
| AR3069 | Physical Training Leadership II | 1 |
| ART1850 | Special Arts Activities for Wellness + Success | 1 |
| ART1855 | Special Arts Workshop for Wellness + Success | .5 |
| ENT3953 | Ignite: Ideate, Innovate, Create! | 1 |
| ENT3959 | Fundamentals of Six Sigma | 1 |
| ENT3961 | Building and Leading Teams | 1 |
| ENT3963 | Deliver: Explore, Develop, Execute! | 1 |
| ENT3964 | Project Management | 1 |
| ENT3971 | 7 Habits of Highly Effective People | 1 |
| ENT3982 | Continuous Improvement Using Lean Principles | 1 |
| ENT3983 | The Culture of Continuous Improvement | 1 |
| FW3620 | Field Ornithology | 1 |
| HON1150 | Launch Your Journey | 1 |
| MUS1510 | Huskies Pep Band | 1 |
| MUS1511 | Campus Concert Band | 1 |
| MUS1530 | Workshop Brass Band | 1 |
| MUS1570 | Private Music Instruction | 1 |
| MUS2530 | R & D Jazz Band | 1 |
| MUS2580 | Concert Choir | 1 |
| MUS3500 | Keweenaw Symphony Orchestra | 1 |
| MUS3510 | Superior Wind Symphony | 1 |
| MUS3530 | Jazz Lab Band | 1 |
| MUS3580 | Chamber Choir | 1 |
| MUS4510 | Chamber Music Ensemble | 1 |
| MUS4530 | Jazz Combo | var |
| PE1000 | Fitness Foundations | 1 |
| PE1010 | Active Michigan Tech | 1 |
| PE1028 | Ski Patrol (Hill) | 1 |
| PE1101 | Team Sports | 1 |
| PE1102 | Hockey | 1 |
| PE1103 | Bait and Fly Casting | 1 |
| PE1105 | Bowling | 1 |
| PE1106 | Golf | 1 |
| PE1108 | Broomball | 1 |
| PE1109 | Aikido | 1 |
| PE1113 | Disc Sports | 1 |
| PE1115 | Beginning Swimming | 1 |
| PE1116 | Intermediate Swimming | 1 |
| PE1117 | Fitness Swimming | 1 |
| PE1118 | Weight/Fitness Training | 1 |
| PE1119 | Conditioning | 1 |
| PE1120 | Beginning Alpine Skiing (Downhill) | 1 |
| PE1121 | Beginning Snowboarding | 1 |
| PE1123 | Telemark Skiing | 1 |
| PE1124 | Intermediate Alpine Skiing (Downhill) | 1 |
| PE1125 | Intermediate Snowboarding | 1 |
| PE1126 | Advanced Skiing | 1 |
| PE1127 | Advanced Snowboarding | 1 |

Activities for Well-Being and Success continued

| | | |
|--------|-------------------------------------|----|
| PE1128 | Alpine Skiing Fusion | 1 |
| PE1129 | Snowboard Fusion | 1 |
| PE1135 | Cross Country Skiing | 1 |
| PE1138 | Racquet Sports | 1 |
| PE1140 | Tennis | 1 |
| PE1142 | Introduction to Brazilian Jiu Jitsu | 1 |
| PE1145 | Rifle Marksmanship | 1 |
| PE1146 | Billiards | 1 |
| PE1148 | Skating | 1 |
| PE1150 | Lifetime Activities | 1 |
| PE1152 | Social Dance | 1 |
| PE1153 | Zumba | 1 |
| PE1154 | Aerobics | 1 |
| PE1155 | Road Biking | 1 |
| PE1156 | Mountain Biking | 1 |
| PE1165 | Rowing | 1 |
| PE1167 | Beginning Yoga | 1 |
| PE1169 | Indoor Cycling | 1 |
| PE1170 | TaeKwonDo | 1 |
| PE1175 | Hiking | 1 |
| PE1177 | Fundamentals of Laser Tag | 1 |
| PE1205 | Special Topics | .5 |
| PE1209 | Intermediate Aikido | 1 |
| PE1210 | Special Topics | 1 |
| PE1220 | Introduction to Canoeing | 1 |
| PE1225 | Indoor Rock Climbing | 1 |
| PE1230 | Introduction to Kayaking | 1 |
| PE1235 | Introduction to Log Rolling | 1 |
| PE1240 | Snowshoeing | 1 |
| PE1242 | Brazilian Jiu Jitsu II | 1 |
| PE1245 | Wilderness First Responder | 1 |
| PE1250 | Paintball | 1 |
| PE1267 | Intermediate Yoga | 1 |
| PE1270 | Cardio TaeKwonDo | 1 |
| PE1277 | Strategies of Laser Tag | 1 |
| PE1330 | Club Sports | 1 |
| PE1342 | Intro to Kickboxing | 1 |
| PE1367 | Mindful Yoga | 1 |
| PE1425 | Intramurals | 1 |
| PE1430 | Club Sports Leadership | 1 |
| PE1435 | Self-Defense for Women | 1 |
| PE1436 | Self-Defense for Men | 1 |
| PE1442 | Kickboxing II | 1 |
| PE1450 | Physical Education Fusion – Full | 1 |
| PE1451 | Mountain/Road Bike Fusion | 1 |
| PE1470 | Lifeguard Swimming | 1 |
| PE1480 | Water Safety Instructor | 1 |
| PE2010 | Varsity Football | 1 |
| PE2020 | Varsity Basketball | 1 |
| PE2030 | Varsity Hockey | 1 |
| PE2040 | Varsity Nordic Skiing | 1 |
| PE2050 | Varsity Soccer | 1 |
| PE2080 | Varsity Track | 1 |
| PE2090 | Varsity Tennis | 1 |



Activities for Well-Being and Success continued

| | | |
|----------|---|-----|
| PE2130 | Varsity Volleyball | 1 |
| PE2140 | Varsity Cross Country | 1 |
| PE2150 | Cross Training | 1 |
| PE2160 | Varsity Esports | 1 |
| PE2210 | Special Topics in Physical Education | 1 |
| PSY1100 | Building Emotional Resilience | 1 |
| PSY1101 | Enhanced Performance through Biofeedback/MSPE | 1 |
| PSY1102 | Practical Approaches for Emotional Regulation | 1 |
| PSY1103 | Mindfulness Based Stress Reduction (MBSR) | 1 |
| PSY1104 | Motivation through Self-Compassion | 1 |
| PSY1105 | Foundations of Well-being | 1 |
| SA1000 | Exploring Majors | 1 |
| SND1570 | Private Mixing Lessons | .5 |
| SND2663 | Career Development | 1 |
| SND2664 | Career Development: AES National | 1 |
| SND2665 | Career Development: AES Student Summit | 1 |
| THEA2600 | Acting Practicum | 1 |
| THEA2610 | Entertainment Tech Practicum | var |
| THEA2663 | Career Development | 1 |
| THEA3650 | Portfolio Development | 1 |
| UN1000 | Frameworks for Success for ExSEL | 1 |
| UN1010 | Creating Your Success for Themed Communities | 1 |
| UN1011 | Strategies for Success | 1 |
| UN1020 | Husky Connect Success | 1 |
| UN3023 | Advanced Portfolio for Essential Ed | 1 |



APPROVED TRANSFER COURSES

The following courses are available **ONLY** by transfer.

Math

MA1XXX Approved Transfer Math

Natural and Physical Science

BL1XXX Approved Natural & Physical Science
BL2XXX Approved Natural & Physical Science
BLL1XXX Approved Natural & Physical Science
BLL2XXX Approved Natural & Physical Science
BL1XXX Approved Natural & Physical Science
BL2XXX Approved Natural & Physical Science
BLL1XXX Approved Natural & Physical Science
BLL2XXX Approved Natural & Physical Science
CH1XXX Approved Natural & Physical Science
CH2XXX Approved Natural & Physical Science
CHL1XXX Approved Natural & Physical Science
CHL2XXX Approved Natural & Physical Science
FW1XXX Approved Natural & Physical Science
FW2XXX Approved Natural & Physical Science
FWL1XXX Approved Natural & Physical Science
FWL2XXX Approved Natural & Physical Science
GE1XXX Approved Natural & Physical Science
GE2XXX Approved Natural & Physical Science
GEL1XXX Approved Natural & Physical Science
GEL2XXX Approved Natural & Physical Science
KIP1XXX Approved Natural & Physical Science
KIP2XXX Approved Natural & Physical Science
KIPL1XXX Approved Natural & Physical Science
KIPL2XXX Approved Natural & Physical Science
PH1XXX Approved Natural & Physical Science
PH2XXX Approved Natural & Physical Science
PHL1XXX Approved Natural & Physical Science
PHL2XXX Approved Natural & Physical Science
SCI1XXX Approved Natural & Physical Science
SCI2XXX Approved Natural & Physical Science
SCIL1XXX Approved Natural & Physical Science
SCIL2XXX Approved Natural & Physical Science

STEM

All Math and Natural and Physical Science approved transfer courses listed previously

Communication Intensive

HU1XX5 Approved Transfer Communication Intensive
HU2XX5 Approved Transfer Communication Intensive
HU3XX5 Approved Transfer Communication Intensive
HU4XX5 Approved Transfer Communication Intensive
CMIN1XXX Approved Transfer Communication Intensive
CMIN2XXX Approved Transfer Communication Intensive
CMIN3XXX Approved Transfer Communication Intensive
CMIN4XXX Approved Transfer Communication Intensive

Intercultural Competency

INC3XXX Approved Transfer Intercultural Competency

INC4XXX Approved Transfer Intercultural Competency

Arts and Culture

ARCU1XXX Approved Transfer Arts and Culture
ARCU2XXX Approved Transfer Arts and Culture
ARCU3XXX Approved Transfer Arts and Culture
ARCU4XXX Approved Transfer Arts and Culture

SHAPE

ART1XXX Approved SHAPE elective
ART2XXX Approved SHAPE elective
ART3XXX Approved SHAPE elective
ART4XXX Approved SHAPE elective
EC1XXX Approved SHAPE elective
EC2XXX Approved SHAPE elective
EC3XXX Approved SHAPE elective
EC4XXX Approved SHAPE elective
HF1XXX Approved SHAPE elective
HF2XXX Approved SHAPE elective
HF3XXX Approved SHAPE elective
HF4XXX Approved SHAPE elective
HU1XXX Approved SHAPE elective
HU2XXX Approved SHAPE elective
HU3XXX Approved SHAPE elective
HU4XXX Approved SHAPE elective
MUS1XXX Approved SHAPE elective
MUS2XXX Approved SHAPE elective
MUS3XXX Approved SHAPE elective
MUS4XXX Approved SHAPE elective
PSY1XXX Approved SHAPE elective
PSY2XXX Approved SHAPE elective
PSY3XXX Approved SHAPE elective
PSY4XXX Approved SHAPE elective
SND1XXX Approved SHAPE elective
SND2XXX Approved SHAPE elective
SND3XXX Approved SHAPE elective
SND4XXX Approved SHAPE elective
SS1XXX Approved SHAPE elective
SS2XXX Approved SHAPE elective
SS3XXX Approved SHAPE elective
SS4XXX Approved SHAPE elective
THEA1XXX Approved SHAPE elective
THEA2XXX Approved SHAPE elective
THEA3XXX Approved SHAPE elective
THEA4XXX Approved SHAPE elective

Activities for Well-Being and Success

PE1XXX Approved Activities elective
PE2XXX Approved Activities elective
ACTV1XXX Approved Activities elective
ACTV2XXX Approved Activities elective