



WAYNE STATE

College of Education

Division of Academic Services

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Majors and Minors for Secondary Education Post Bachelor and Master of Arts in Teaching Curriculum Guide

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SCIENCE MAJORS: SINGLE-SUBJECT

► Some science courses may require advanced courses in mathematics or science. Placement testing may also be required for courses in mathematics and chemistry. Please consult the Bulletin for prerequisite requirements prior to registering for science and mathematics courses.

► Students are advised to begin fulfilling the requirement in mathematics as early as possible.

BIOLOGY MAJOR (Minimum 32cr + additional cr in Science)

- BIO 1500 Basic Life Diversity)..... 4
- BIO 1510 Basic Life Mechanisms..... 4
- BIO 2200 Introductory Microbiology..... 5
- BIO 2600 Introduction to Cell Biology..... 3
- BIO 2870 Anatomy and Physiology..... 5
- BIO 3070 Genetics..... 5
- BIO 3500 Ecology and the Environment..... 3
- BIO 4200 Evolution..... 3

► **Additional Science Requirements**

- CHM 1220 General Chemistry I..... 4
CHM 1230 Lab (concurrently with 1220)..... 1
- GEL 1010 Geology: The Science of the Earth..... 3
GEL 1011 Lab (concurrently with 1010)..... 1
- PHY 2130 General Physics I..... 4
PHY 2131 Lab (concurrently with 2130)..... 1
- Science Elective(s)..... 5

- SCE 6010 Safety in the Science Classroom..... 2
- CHM 6740 Laboratory Safety..... 2

► **Additional Mathematics Requirement**

- MAT 2010 Calculus I..... 4
- STA 2210 Probability & Statistics..... 4

CHEMISTRY MAJOR (Minimum 32cr +additional cr in Science)

- CHM 1220 General Chemistry I..... 4
CHM 1230 Lab (concurrently with 1220)..... 1
- CHM 1240 Organic Chemistry I..... 4
CHM 1250 Lab (concurrently with 1240)..... 1
- CHM 2220 Organic Chemistry II..... 3
CHM 2230 Lab (concurrently with 2220)..... 2
- CHM 2280 General Chemistry II: Analytical Chemistry..... 3
CHM 2290 Lab (concurrently with 2280)..... 2
- CHM 3020 Intermediate Inorganic Chemistry I..... 3
- CHM 5400 Biological Physical Chemistry[^]..... 4
CHM 5550 Lab (concurrently with 5400)..... 2
- CHM 5600 Survey of Biochemistry..... 3

► **Additional Science Requirements**

- BIO 1050 An Introduction to Life*..... 4
- GEL 1010 Geology: The Science of the Earth..... 3
GEL 1011 Lab (concurrently with 1010)..... 1
- PHY 2130 General Physics I..... 4
PHY 2131 Lab (concurrently with 2130)..... 1
- Science Elective(s)..... 4

- SCE 6010 Safety in the Science Classroom..... 2
- CHM 6740 Laboratory Safety..... 2

► **Additional Mathematics Requirement**

- MAT 2010 Calculus I..... 4
- STA 2210 Probability & Statistics..... 4

[^] Prerequisite or co-requisite: MAT 2030 Calculus III
and PHY 2170 Gen Phys I

EARTH/SPACE MAJOR (Minimum 32cr + additional cr in Science)

- GEL 1010 Geology: The Science of the Earth..... 3
GEL 1011 Lab (concurrently with 1010)..... 1
- GEL 1020 Interpreting the Earth 4
- GEL 1050 Oceanography..... 4
- GEL 1370 Meteorology: The Study of Weather 3
- GEL 2130 Mineralogy 4
- GEL 3300 Structural Geology 4
- GEL 3400 Principles of Sedimentology & Stratigraphy 4
- AST 2010 Descriptive Astronomy..... 4
AST 2011 Lab (concurrently with 2010)..... 1

► **Additional Science Requirements**

- BIO 1050 An Introduction to Life*..... 4
- CHM 1220 General Chemistry I..... 4
CHM 1230 Lab (concurrently with 1220)..... 1
- PHY 2130 General Physics I..... 3
PHY 2131 Lab (concurrently with 2130)..... 1

- SCE 6010 Safety in the Science Classroom..... 2
- CHM 6740 Laboratory Safety..... 2

► **Additional Mathematics Requirement**

- MAT 2010 Calculus I..... 4
- STA 2210 Probability & Statistics..... 4

PHYSICS MAJOR (Minimum 32cr + additional cr in Science)

- PHY 2170 University Physics for Scientist I..... 4
PHY 2171 Lab (concurrently with 2170)..... 1
- PHY 2180 University Physics for Scientist II..... 4
PHY 2181 Lab (concurrently with 2180)..... 1
- PHY 3100 The Sounds of Music..... 4
- PHY 3300 Introductory Modern Physics[§]..... 3
PHY 3310 Lab (concurrently with 3300)..... 2
- PHY 5200 Classical Mechanics I [^]#..... 3
- PHY 5340 Optics[#]..... 3
PHY 5341 Lab (concurrently with 5340)..... 2
- PHY 5620 Electronics and Electrical Measurements..... 3
- PHY 6600 Electromagnetic Fields I [~]..... 3

► **Additional Science Requirements**

- BIO 1050 An Introduction to Life*..... 3-4
- CHM 1220 General Chemistry I..... 4
CHM 1230 Lab (concurrently with 1220)..... 1
- GEL 1010 Geology: The Science of the Earth..... 3
GEL 1011 Lab (concurrently with 1010)..... 1
- Science Elective(s)..... 4

- SCE 6010 Safety in the Science Classroom..... 2
- CHM 6740 Laboratory Safety..... 2

► **Additional Mathematics Requirement**

- MAT 2010 Calculus I..... 4
- STA 2210 Probability & Statistics..... 4

[§] Prerequisite: MAT 2020 Calculus II

[^] Prerequisite: PHY 5100 Methods of Theoretical Phys I

[#] Prerequisite: MAT 2030 Calculus III

[~] Prerequisite: MAT 2150 Differential Equations

* Some Science courses are offered for varying credits.
Students are to complete the above Science courses for the
specified amount of credit.

INTEGRATED SCIENCE COMPREHENSIVE MAJOR (Min. 61 cr)

- ▶ A minor is not required with the Integrated Science Comprehensive major.
- ▶ Some science courses may require advanced courses in mathematics or science. Placement testing may also be required for courses in mathematics and chemistry. Please consult the Bulletin for prerequisite requirements prior to registering for science and mathematics courses.
- ▶ Students are advised to begin fulfilling the requirement in mathematics as early as possible.

BIOLOGY (5 courses for 20 credits minimum)

- BIO 1500 Basic Life Diversity..... 4
- BIO 1510 Basic Life Mechanisms..... 4
- BIO 2200 Introductory Microbiology..... 5
- BIO 3070 Genetics..... 5

- ▶ **The only prerequisite to BIO 3070 for Secondary Education Students with an Integrated Science Major is BIO 2200 Introductory Microbiology.**

- BIO 4120 Comparative Physiology..... 4

CHEMISTRY (4 courses, plus labs for 17 credits minimum)

- CHM 1220 General Chemistry I..... 4
- CHM 1230 Lab (concurrently with 1220)..... 1
- CHM 1240 Organic Chemistry I..... 4
- CHM 1250 Lab (concurrently with 1240)..... 1
- CHM 2220 Organic Chemistry II..... 3
- CHM 2230 Lab (concurrently with 2220)..... 2

- SCE 6010 Safety in the Science Classroom..... 2

- CHM 6740 Laboratory Safety..... 2

PHYSICS (3 courses, plus labs for 12 credits minimum)

- PHY 2130 General Physics I..... 4
- PHY 2131 Lab (concurrently with 2130)..... 1
- PHY 2140 General Physics II..... 4
- PHY 2141 Lab (concurrently with 2140)..... 1
- PHY 5015 Non-Classical Physics for Educators..... 3
- PHY 3310 Lab (concurrently with 5015)..... 2

- ▶ **When registering for PHY 3310, please contact Dawn Niedermiller, Dept of Physics Academic Advisor, for an override by sending an email message to aa9216@wayne.edu or by calling (313) 577-0180. Include the term and CRN of the section you wish**

EARTH/SPACE SCIENCE (3 courses, plus labs for 12 credits)

- AST 2010 Descriptive Astronomy..... 4
- AST 2011 Lab (concurrently with 2010)..... 1
- GEL 1010 Geology: The Science of the Earth..... 3
- GEL 1011 Lab (concurrently with 1010)..... 1
- GEL 1370 Meteorology: The Study of Weather 3

ADDITIONAL REQUIREMENTS

- MAT 1800 Elementary Functions..... 4
- MAT ____ Elective in Mathematics..... 2
- CSC ____ Elective in Computer Science..... 2

* Some Science courses are offered for varying credits. Students are to complete the above Science courses for the specified amount of credit.

MATHEMATICS MAJOR (Minimum 41 credits)

- MAT 2010 Calculus I..... 4
- MAT 2020 Calculus II..... 4
- MAT 2030 Calculus III..... 4
- STA 2210 Probability & Statistics..... 4
- MAT 2250 Elementary Linear Algebra..... 3
- MAT 2860 Discrete Mathematics..... 3
- MAT 5000 Fundamental Concepts of Math & Proof Writing..... 3

- MAT 5070 Elementary Analysis..... 4

- MAT 5400 Elementary Theory of Numbers..... 3

- MAT 5520 Introduction to Topology..... 3

- MAT 6140 Geometry: An Axiomatic Approach..... 3

- MAT 5420 Algebra 1..... 4

- MAT 6170 Algebra: Ring Theory Thr. Explor, Conj, & Proof.... 4

- MAE 6200 Teaching Arithmetic, Algebra, & Functions..... 3

- MAE 6210 Teaching Geom, Prob/Stats, & Discrete Math..... 3

- ▶ **All students who plan to take MAT 0995, 1000, 1050, 1110, 1120, 1500, 1800, or 2010 as their first mathematics course at WSU, must take the Mathematics Placement Exam. Please contact Testing, Evaluation, & Research Services at (313) 577-**

ENGLISH MAJOR (Minimum 30 credits)

- ENG 2200 Shakespeare..... 3
- ENG 2390 Intro African-American Literature & Writing..... 3
- ENG 3110 English Literature to 1700..... 3
- ENG 3120 English Literature after 1700..... 3
- ENG 3130 American Literature to 1865..... 3
- ENG 3140 American Literature after 1865..... 3

- ENG 5420 American Literature: 1865-1914..... 3

- ENG 5450 Modern American Literature..... 3

- ENG 5720 Linguistics & Education (LIN 5720)..... 3

- ▶ **ENG 5720 is strongly recommended prior to ENG 5730**

- ENG 5730 English Grammar (LIN 5730)..... 3

- ▶ **ENG 2390 is strongly recommended prior to ENG 6010**

- ENG 6010 Tutoring Practicum..... 3

SPEECH MAJOR (Minimum 33 credits beyond COM 1010)

- ▶ **COM 1010 is a prerequisite for this major.**

- COM 1500 Survey of Mass Communication..... 3

- COM 2000 Intro to Communication Studies..... 3

- COM 2110 Argumentation and Debate..... 3

- COM 2200 Interpersonal Communication..... 3

- COM 2500 Oral Interpretation of Literature..... 3

- COM 1600 Introduction to Audio-TV-Film Production..... 3

- COM 2280 Digital Photo Journalism..... 3

- COM 5300 Layout and Design..... 3

- COM 4270 Group Communication & Human Interaction..... 3

- COM 3400 Theories of Communication..... 3

- COM 4130 Communication Ethics 3

- COM 4300 Intercultural Communication..... 3

- COM 6070 Directing Forensics..... 3

- ▶ **COM 6070 is only offered in fall semesters of even-numbered years.**

FOREIGN LANGUAGE

► Courses lower than 3000 will not be counted for a major in Foreign Language. Computation of the major includes only those courses taken in college beginning at the 3000 level. The courses must include grammar, literature, culture, and conversation. Students may be required to complete lower level courses as prerequisites to courses at the 3000 level or above.

► Students who major in a language are advised to minor in English or in a second foreign language.

► Students must score at the Advanced Low Level in French, or Spanish, or at the Intermediate High Level in Arabic as measured by the Oral Proficiency Interview (OPI) from the American Council on the Teaching of Foreign Languages and pass the Michigan Test for Teacher Certification in the appropriate subject area. For more information about the OPI, please visit the following website: <https://testing.wayne.edu/>

► K-12 certification is available for students majoring in Arabic, French, or Spanish. Students will complete the following methodology courses after admission to teacher certification program: LED 6500 (3cr), LED 6520 (3cr), LED 6530 (3cr), EDP 5450

ARABIC MAJOR (Minimum 30 credits)

- ARB 3110 Advanced Arabic I..... 3
- ARB 3120 Advanced Arabic II..... 3
- ARB 3210 Spoken Arabic..... 3
- ARB 5230 Structure of Arabic (NE 5230)..... 3
- ARB 5140 Modern Arabic Literature in Arabic and Eng..... 3
- ARB 5010 Medieval Arabic Texts..... 3
- ARB 5020 Media Arabic..... 3
- ARB 5240 Quranic Arabic..... 3
- NE 3040 Twentieth Century Middle East (HIS 3320)..... 3
- NE 3550 Arab Society in Transition (ANT 3550)..... 3

FRENCH MAJOR (Minimum 30 credits)

- FRE 3200 French Cafe..... 3
- FRE 3300 Prose, Poetry, and Performance..... 3
- FRE 4610 Introduction to Literary Textual Analysis..... 3
- FRE 4620 Topics in Sociocultural Analysis..... 3
- FRE 5100 Advanced Composition..... 3
- FRE 5200 French Phonetics & Pronunciation..... 3
- FRE 5305 Advanced Grammar & Stylistics..... 3
- FRE 6450 French Civilization..... 3
- FRE 6470 Contemporary French Society & Institutions..... 3

► Select two (2) of the following courses (three semester hours each) for a total of six (6) semester hours:

FRE 6510 French Sixteenth Cent Lit, FRE 6630 French Seventeenth Cent Lit, FRE 6650 French Eighteenth Cent Lit, FRE 6770 Studies in French Literature, FRE 6810 French Nineteenth Cent Lit, FRE 6840 French Twentieth Cent Lit, or

SPANISH MAJOR (Minimum 30 credits)

- SPA 3025 Cultural Connections, Grammar and Comp II..... 3
- SPA 3200 Conversation..... 3
- SPA 3300 Introduction to Cultural and Literary Analysis..... 3
- SPA 4610 Intro to Early Modern Spanish Lit..... 3
- SPA 4620 Intro to Modern and Contemporary Spanish Lit..... 3
- SPA 4630 Intro to Colonial Latin American Lit..... 3
- SPA 4640 Intro to Modern and Contemporary Latin Am Lit..... 3
- SPA 5100 Advanced Composition..... 3
- SPA 5200 Spanish Phonetics..... 3
- SPA 5550 Spanish Culture and Its Tradition..... 3
- SPA 5560 Spanish American Cultures and their Trad..... 3
- SPA 5570 Topics in Hispanic Culture or Language..... 3
- SPA 6400 Introduction to Hispanic Linguistics..... 3
- SPA 6560 Cervantes..... 3
- SPA 6620 Latin Am Novel in the 20th and 21st Centuries..... 3

VISUAL ARTS FOUNDATION COURSES (Minimum 30 credits)

- ADR 1050 Drawing I..... 3
- ADR 1060 Drawing II..... 3
- AH 1110 Paleolithic Through Gothic Art Survey 3
- AH 1120 Renaissance Through Modern Art Survey..... 3
- ACO 1200 Surface Studio..... 3
- ACO 1230 Space Studio..... 3
- ACO 1270 Time Studio..... 3
- ADR 2070 Beginning Life Drawing..... 3
- ADR 3070 Intermediate Life Drawing..... 3
- APA 2000 Oil Painting I..... 3
- ASL 2150 Beginning Sculpture..... 3

► In addition to the foundation courses Visual Arts Education students need to submit a portfolio.

► **Art Portfolio Submission Guidelines**

Please submit original artwork unless size or weight makes transportation of the work impractical. Make sure that CD's, photos, or slides are of acceptable quality.

Include examples of drawing, painting, design, sculpture, ceramics and other two and three-dimensional work. All work should be identified by name of the artist (your name), its size, the year it was produced, and the class in which it was produced. Submit only college level work or work you have produced as a professional artist. Two-dimensional work should be matted or framed. (i.e. in appropriate display form.

Three-dimensional work of appropriate size and weight should be presented in slide, photo or CD formats.

Submit a list of all college level art classes you have taken and the grades received.

If questions about the evaluation arise after the jurying process, make an appointment to meet privately with the jurors. The program coordinator may also be invited to these meeting.

Your work is valuable to you and storage space is limited. Please pick it up when the jurying is completed. Special arrangements for storage should be made in advance.

SOCIAL STUDIES GROUP MAJOR (Minimum 36 credits)

- PS 1010 American Government..... 4
- PS 3070 Michigan Politics..... 4
- GPH 1100 World Regional Patterns..... 4
- GPH 2200 Geography of Michigan..... 3
- HIS 1000 World Civilization to 1500..... 4
- HIS 1300 Europe and the World: 1500-1945..... 4
- HIS 2040 United States to 1877..... 3-4
- HIS 2050 United States Since 1877..... 3-4
- HIS 2240 History of Michigan..... 3-4
- ECO 2010 Principles of Microeconomics..... 3-4
- ECO 2020 Principles of Macroeconomics..... 3-4

* Some courses in Social Studies are offered for 3 or 4 credits. Please verify that your total credits meet the required minimum credit hours for the Social Studies major. All courses listed above are required.

SOCIAL STUDIES COMPREHENSIVE MAJOR (Minimum 54 credits)

► A minor is not required with the Social Studies Comprehensive major.

- PS 1010 American Government..... 4
- PS 2420 Ethics and Politics of Public Policy..... 4
- PS 2820 Intro to Peace and Conflict Studies..... 3
- PS 3070 Michigan Politics..... 4
- GPH 1100 World Regional Patterns..... 4
- GPH 2000 Intro to Urban Studies..... 4
- GPH 2200 Geography of Michigan..... 3
- HIS 1000 World Civilization to 1500..... 4
- HIS 1300 Europe and the World: 1500-1945..... 4
- HIS 1400 The World Since 1945..... 4
- HIS 2040 United States to 1877..... 3-4
- HIS 2050 United States Since 1877..... 3-4
- HIS 2240 History of Michigan..... 3-4
- ECO 2010 Principles of Microeconomics..... 3-4
- ECO 2020 Principles of Macroeconomics..... 3-4
- ECO 5410 Economics of Race and Gender..... 4

ECONOMICS MAJOR (Minimum 30 credits)

- ECO 2010 Principles of Microeconomics..... 4
 - ECO 2020 Principles of Macroeconomics..... 4
 - ECO 5100 Introductory Statistics & Econometrics..... 4
- | |
|--|
| <input type="checkbox"/> ECO 5300 International Trade..... 4 |
| <input type="checkbox"/> ECO 5310 International Finance..... 4 |
- ECO 5400 Labor Economics..... 4
 - ECO 5410 Economics of Race & Gender..... 4
 - ECO ____ Elective at or above the 5000 level..... 4
 - ECO ____ Elective at or above the 5000 level..... 4

HISTORY MAJOR (Minimum 30 credits)

- HIS 1000 World Civilization to 1500..... 4
- HIS 1300 Europe and the World: 1500-1945..... 3-4
- HIS 1400 The World Since 1945..... 3-4
- HIS 2040 United States to 1877..... 3-4
- HIS 2050 United States Since 1877..... 3-4
- HIS 2240 History of Michigan..... 3-4
- HIS 3140 The Black Experience in America I: 1619-1865.... 3-4
- HIS 3150 The Black Experience in America II: 1865-Present 3-4
- HIS ____ Elective at or above the 3000 level..... 3
- HIS ____ Elective at or above the 3000 level..... 3

POLITICAL SCIENCE MAJOR (Minimum 30 credits)

- PS 1010 American Government..... 4
- PS 2710 Intro to Comparative Politics..... 4
- PS 2810 World Politics..... 4
- PS 3020 Political Parties & Elections..... 4
- PS 3070 Michigan Politics..... 4
- PS 5120 Constitutional Rights & Liberties..... 4
- PS ____ Elective at or above the 3000 level..... 3
- PS ____ Elective at or above the 3000 level..... 3

CAREER AND TECHNICAL EDUCATION

- Health Occupations (**Second Academic Major required**)
- Trade & Industry (**Second Academic Major required**)

CTE Majors: Two years (4000 hours) of recent and relevant work experience (*within the past five (5) years*) in an occupation related to the major is required. The past five (5) years is calculated from the time when the certification application is submitted, which is near the completion of the certification coursework.

For more information, contact Dr. Geralyn Stephens at (313) 577-0946 or through e-mail at ad9472@wayne.edu.

Note: Courses in Career & Technical specializations, which are offered as majors in community colleges, must be completed prior to admission to the teacher certification program.

STANDARD CTE CERTIFICATE

- ▶ **Bachelors Degree**
- ▶ **Two years (4000 hours) of recent and relevant work experience (within the past five (5) years) in an occupation**

- CTE 5401 Instructional Practices for CTE Module 1..... 1
- CTE 5402 Instructional Practices for CTE Module 2..... 1
- CTE 5403 Instructional Practices for CTE Module 3..... 1
- CTE 5404 Instructional Practices for CTE Module 4..... 1
- CTE 5405 Instructional Practices for CTE Module 5..... 1
- CTE 5406 Instructional Practices for CTE Module 6..... 1

OTHER SECONDARY MAJORS**Health Education**

Contact Dr. Mariane Fahlman at (313) 577-5066 or through e-mail at aa1673@wayne.edu for advising.

Kinesiology Pedagogy (Physical Education)

Contact Kinesiology, Health & Sport Studies, at (313) 577-4249 to schedule an appointment with a KHS Advisor.

Music Education: Instrumental & Vocal

Contact Dr. Wendy K. Matthews at (313) 577-2674 or through e-mail at ag7658@wayne.edu for advising.

SCIENCE MINORS: SINGLE-SUBJECT

► Some science courses may require advanced courses in mathematics or science. Placement testing may also be required for courses in mathematics and chemistry. Please consult the Bulletin for prerequisite requirements prior to registering for science and mathematics courses.

► Students are advised to begin fulfilling the requirement in mathematics as early as possible.

► The minimum credit hour requirement for Single-Subject Science Minors does not include the additional requirements in lab safety (except in the Chemistry minor) or mathematics.

BIOLOGY MINOR (Minimum 21 credits)

- BIO 1500 Basic Life Diversity..... 4
- BIO 1510 Basic Life Mechanisms..... 4
- BIO 2200 Introductory Microbiology..... 4
- BIO 2870 Anatomy and Physiology..... 5
- BIO 3070 Genetics..... 4

ADDITIONAL REQUIREMENTS

- SCE 6010 Safety in the Science Classroom..... 2

CHEMISTRY MINOR (Minimum 22 credits)

- CHM 1220 General Chemistry I..... 4
- CHM 1230 Lab (concurrently with 1220)..... 1
- CHM 1240 Organic Chemistry I..... 4
- CHM 1250 Lab (concurrently with 1240)..... 1
- CHM 2220 Organic Chemistry II..... 3
- CHM 2230 Lab (concurrently with 2220)..... 2
- CHM 2280 General Chemistry II: Analytical Chemistry..... 3
- CHM 2290 Lab (concurrently with 2280)..... 2

ADDITIONAL REQUIREMENTS

- SCE 6010 Safety in the Science Classroom..... 2

EARTH/SPACE MINOR (Minimum 24 credits)

- GEL 1010 Geology: The Science of the Earth..... 3
- GEL 1011 Lab (concurrently with 1010)..... 1
- GEL 1020 Interpreting the Earth 4
- GEL 1370 Meteorology: The Study of Weather 3
- GEL 2130 Mineralogy 4
- GEL 3160 Petrology 4
- GEL 3400 Principles of Sedimentology & Stratigraphy 4
- AST 2010 Descriptive Astronomy..... 4
- AST 2011 Lab (concurrently with 2010)..... 1

ADDITIONAL REQUIREMENTS

- SCE 6010 Safety in the Science Classroom..... 2

* Some Science courses are offered for varying credits. Students are to complete the above Science courses for the specified amount of credit.

PHYSICS MINOR (Minimum 22 credits)

- PHY 2130 General Physics I..... 3
- PHY 2131 Lab (concurrently with 2130)..... 1
- PHY 2140 General Physics II..... 3
- PHY 2141 Lab (concurrently with 2140)..... 1
- PHY 5015 Non-Classical Physics for Educators..... 3
- PHY 7010 Modern Physics for Secondary Educators..... 3
- PHY 3310 Lab (concurrently with 5015 or 7010)..... 1

► When registering for PHY 3310, please contact Dawn Niedermiller, Dept of Physics Academic Advisor, for an override by sending an email message to aa9216@wayne.edu or by calling (313) 577-0180. Include the term and CRN of the section you wish to add.

- PHY 5620 Electronics and Electrical Measurements..... 4
- PHY 1040 Einstein, Relativity and Quanta: A Concept Intro 3
- PHY 3100 The Sounds of Music..... 4
- PHY ____ Elective at or above the 1000 level..... 3

ADDITIONAL REQUIREMENTS

- SCE 6010 Safety in the Science Classroom..... 2

MATHEMATICS MINOR (Minimum 31 credits)

- MAT 2010 Calculus I..... 4
- MAT 2020 Calculus II..... 4
- STA 2210 Probability & Statistics..... 4
- MAT 2250 Elementary Linear Algebra..... 3
- MAT 2860 Discrete Mathematics..... 3
- MAT 5000 Fundamental Concepts of Math & Proof Writing..... 3
- MAT 5420 Algebra 1..... 4
- MAT 6170 Algebra: Ring Theory Thr. Explor, Conj, & Proof.... 4
- MAE 6200 Teaching Arithmetic, Algebra, and Functions..... 3
- MAE 6210 Teaching Geometry, Prob/Stats, & Discrete Math.. 3

► All students who plan to take MAT 0995, 1000, 1050, 1110, 1120, 1500, 1800, or 2010 as their first mathematics course at WSU, must take the Mathematics Placement Exam. Please contact Testing, Evaluation, & Research Services at (313) 577-3400 or online at <http://www.testing.wayne.edu/> for

FOREIGN LANGUAGE MINOR

► Courses lower than 3000 will not be counted for a minor in Foreign Language. Computation of the minor includes only those courses taken in college beginning at the 3000 level. The courses must include grammar, literature, culture, and conversation. Students may be required to complete lower level courses as prerequisites to courses at the 3000 level or above.

► Students must score at the Advanced Low Level in French, or Spanish, or at the Intermediate High Level in Arabic as measured by the Oral Proficiency Interview (OPI) from the American Council on the Teaching of Foreign Languages (ACTFL) and pass the Michigan Test for Teacher Certification in the appropriate subject area. For more information about the OPI, please visit the following website: <https://testing.wayne.edu/>

ARABIC MINOR (Minimum 21 credits)

- ARB 3110 Advanced Arabic I..... 3
- ARB 3120 Advanced Arabic II..... 3
- ARB 3210 Spoken Arabic..... 3
- ARB 5230 Structure of Arabic (NE 5230)..... 3
- ARB 5140 Modern Arabic Literature in Arabic and Eng..... 3
- NE 3040 Twentieth Century Middle East (HIS 3320)..... 3
- NE 3550 Arab Society in Transition (ANT 3550)..... 3

FRENCH MINOR (Minimum 21 credits)

- FRE 3200 French Cafe..... 3
- FRE 3300 Prose, Poetry, and Performance..... 3
- FRE 4610 Introduction to Literary Textual Analysis..... 3
- FRE 4620 Topics in Sociocultural Analysis..... 3
- FRE 5100 Advanced Composition..... 3
- FRE 5200 French Phonetics & Pronunciation..... 3
- FRE 5305 Advanced Grammar & Stylistics..... 3

SPANISH MINOR (Minimum 21 credits)

- SPA 3025 Cultural Connections, Grammar and Comp II..... 3
- SPA 3200 Conversation..... 3
- SPA 3300 Introduction to Cultural and Literary Analysis..... 3
- SPA 4610 Intro to Early Modern Spanish Lit..... 3
- SPA 4620 Intro to Modern and Contemporary Spanish Lit..... 3
- SPA 4630 Intro to Colonial Latin American Lit..... 3
- SPA 4640 Intro to Modern and Contemporary Latin Am Lit..... 3
- SPA 5100 Advanced Composition..... 3
- SPA 5200 Spanish Phonetics..... 3

BILINGUAL-BICULTURAL MINOR (Minimum 21 credits)

► Students must demonstrate advanced low proficiency (speaking, reading, and writing) in a non-English language as measured by the Oral Proficiency Interview (OPI) and the Writing Proficiency Test (WPT) from the ACTFL. For more information about the OPI and WPT, please visit the following website: <https://testing.wayne.edu/>

► The minor is completed after admission to the teacher certification program.

► Students should complete their pre and/or student teaching in a bilingual classroom setting.

- BBE 5500 Introduction to Bilingual/Bicultural Education..... 3
- BBE 6560 Teaching Methods in Bilingual/Bicultural Ed..... 3
- LED 6520 Teaching English as a Second Lang: Methods I..... 3
- BBE 6850 Applied Linguistics: Issues in Bilingual Ed..... 3
- BBE 6590 Culture & Language in Bilingual/Bicultural Ed..... 3
- RLL 6700 Second Language Literacy Development K-12..... 3
- LED 6555 Integration of Language & Content in Teaching..... 3

ENGLISH AS A SECOND LANGUAGE MINOR (Minimum 21 credits)

► A major or minor in English is strongly recommended with an ESL Minor.

► The minor is completed after admission to the teacher certification program.

- LED 6520 Teaching English as a Second Lang: Methods I..... 3
- LED 6510 Second Lang Acquisition & Teaching Grammar..... 3
- LED 6565 Assessment in Language Teaching..... 3
- BBE 6850 Applied Linguistics: Issues in Bilingual Ed..... 3
- LED 6580 Culture as the Basis for Language Teaching..... 3
- RLL 6700 Second Language Literacy Development K-12..... 3
- LED 6555 Integration of Language & Content in Teaching..... 3

ENGLISH MINOR (Minimum 24 credits)

- ENG 2200 Shakespeare..... 3
- ENG 2390 Intro African-American Literature & Writing..... 3
- ENG 3110 English Literature to 1700..... 3
- ENG 3120 English Literature after 1700..... 3
- ENG 3130 American Literature to 1865..... 3
- ENG 3140 American Literature after 1865..... 3
- ENG 5420 American Literature: 1865-1914..... 3
- ENG 5450 Modern American Literature..... 3
- ENG 5720 Linguistics & Education (LIN 5720)..... 3
- ▶ **ENG 5720 is strongly recommended prior to ENG 5730**
- ENG 5730 English Grammar (LIN 5730)..... 3
- ▶ **ENG 2390 is strongly recommended prior to ENG 6010**
- ENG 6010 Tutoring Practicum..... 3

SPEECH MINOR (Minimum 21 credits beyond COM 1010)

- ▶ **COM 1010** is a prerequisite for this minor.
- COM 1500 Survey of Mass Communication..... 3
- COM 2000 Intro to Communication Studies..... 3
- COM 2110 Argumentation and Debate..... 3
- COM 2200 Interpersonal Communication..... 3
- COM 2500 Oral Interpretation of Literature..... 3
- COM 4130 Communication Ethics 3
- COM 6070 Directing Forensics..... 3

ECONOMICS MINOR (Minimum 21 credits)

- ECO 2010 Principles of Microeconomics..... 3-4
- ECO 2020 Principles of Macroeconomics..... 3-4
- ECO 5300 International Trade..... 4
- ECO 5310 International Finance..... 4
- ECO 5400 Labor Economics..... 4
- ECO 5410 Economics of Race & Gender..... 4
- ECO ____ Elective at or above the 5000 level..... 3

HISTORY MINOR (Minimum 21 credits)

- HIS 1000 World Civilization to 1500..... 3-4
- HIS 1300 Europe and the World: 1500-1945..... 3-4
- HIS 1400 The World Since 1945..... 3-4
- HIS 2040 United States to 1877..... 3-4
- HIS 2050 United States Since 1877..... 3-4
- HIS 2240 History of Michigan..... 3-4
- HIS 3140 The Black Experience in America I: 1619-1865..... 3-4
- HIS 3150 The Black Experience in America II: 1865-Present.. 3-4

POLITICAL SCIENCE MINOR (Minimum 20 credits)

- PS 1010 American Government..... 4
- PS 2710 Intro to Comparative Politics..... 4
- PS 2810 World Politics..... 4
- PS 3020 Political Parties & Elections..... 4
- PS 3070 Michigan Politics..... 4

HEALTH EDUCATION MINOR (Minimum 21 credits)

- HE 3300 Health of the School Child..... 3
- HE 3440 Nutrition & Health Education..... 3
- KHS 6540 Workshop in Nutrition..... 3
- HE 4340 Family & Reproductive Health..... 3
- HE 5440 Mental Health & Substance Abuse..... 3
- ▶ **HE 5620 requires completion of 12 semester hours in Health (prerequisite).**
- HE 5620 Performance Based Assessment in Health Ed..... 3
- ▶ **HE 3330 or HE 6500 requires completion of 15 semester hours in Health (prerequisite).**
- HE 3330 Methods in Teaching Health..... 3
- HE 6500 Comprehensive School Health Education..... 3
- ▶ **HE 6430 requires completion of HE 3330 or HE 6500.**
- HE 6430 School Health Curriculum..... 3
- ▶ **Students who minor in Health Education are advised by Dr. Mariane Fahlman. Contact Dr. Fahlman at (313) 577-5066.**

PHYSICAL EDUCATION MINOR (Minimum 27 credits)

- KIN 5100 Anatomical and Physiological Bases of Phy Act..... 3
- KIN 5110 Motor Learning and Development..... 3
- KIN 5200 Effective Teaching and Instructional Practices..... 3
- KIN 5220 Sports I..... 3
- KIN 5240 Fitness Instruction..... 3
- KIN 5400 Adapted Physical Activity..... 3
- KIN 5600 Socio-cultural Issues in Physical Activity..... 3
- ▶ **Select two (2) of the following courses:**
- KIN 5230 Sports II..... 3
- KIN 5250 Adventure and Outdoor Pursuits..... 3
- KIN 5260 Aquatic Leadership..... 3
- ▶ **Students who minor in Physical Education are advised by KHS Advisors. Please call the KHS office, at (313) 577-4249 to schedule an appointment.**

Please Read

► **PUBLIC ACT 96 of 1995:** It is a criminal offense to use, or attempt to use, a college or university transcript that is fraudulently obtained, or forged, or to use other fraudulent credentials to obtain a teacher, school administrator, or school psychologist certificate or to obtain State Board approval.

► **PUBLIC ACT 335 of 1993 Sec. 1531b.** Effective July 1, 1995: Applicants to the teacher certification program must demonstrate successful group work with children. Documentation of this group work is required to enter the Teacher Certification Program. A total of 40 hours of successful group work with children is required. The State defines a group as three (3) or more children (not your own) between the ages of 3 and 18. Students are reminded to find a group work experience that is compatible to the age group they plan to teach. The group work experience needs to be recent (within the last 5 years) at the time of admission to the teacher certification program.

Some examples of group work include: Camp counselor, group tutor, playground director, religious teacher, scout leader, substitute teacher, teacher assistant, team coach or youth leader.

► **PUBLIC ACT 68 of 1993 Sec. 1230:** This act requires public and non public schools to conduct a criminal history check of new teachers, school administrators, school psychologists and other personnel required to hold State Board of Education approvals. Students interested in becoming certified teachers must supply a statewide criminal history check prior to admission to the College of Education and again prior to applying for certification.

If you have criminal background issues, please provide a narrative describing the incident(s) from your perspective for review by a committee in the College of Education. If you do not provide this information at the time of application, your admission/certification will be delayed.

- Have you ever accepted responsibility in a civil infraction (excluding speeding tickets) or been convicted of (pled no contest to) a misdemeanor or felony?
- Have you had a teaching, school counselor, school psychologist, or school administrator certificate suspended or revoked?
- Is there currently action pending against your teaching, school counselor, school psychologist, or school administrator certificate?
- Have you ever surrendered or nullified a teaching, school counselor, school psychologist, or school administrator certificate?

A criminal history check directions may be accessed at http://coe.wayne.edu/pdfs/criminal_history_new.pdf

Any person seeking admission to a teacher certification program who has been convicted of any offense must provide certified copies of all documents relative to his/her conviction, including a "Judgment of Sentence" or "Register of Actions". This document may be obtained from the court where the matter was adjudicated. After review by the College of Education Committee, the applicant will be notified in writing of the Committee's decision.

Note: The State Board of Education may refuse to grant a teaching certificate to an applicant convicted, as an adult, of an act of immoral conduct contributing to the delinquency of a child, or a felony conviction.

► **PUBLIC ACT 18 of 2003 Sec. 1531d.:** This act states that "beginning July 1, 2004, the superintendent of public instruction shall not issue an initial teaching certificate to a person unless the person presents evidence satisfactory to the superintendent of public instruction that the person meets the following: Has successfully completed a course approved by the department in first aid and cardiopulmonary resuscitation... and holds valid certification in these topics issued by one of the following organizations approved by the department [Michigan Department of Education]:"

*American Heart Association • American Red Cross • American Safety and Health Institute • Emergency Care & Safety Institute
Lansing Area Safety Council • Medic First Aid • Safety Council of Southeast Michigan*

Students must submit the following documentation to the College of Education when applying for teacher certification (all of the following must be current):

Certification in Adult CPR • Certification in Child CPR • Certification in First Aid

Certification in automated external defibrillation (AED) is recommended, but not required.

► **It is the student's responsibility to become familiar with and to complete all requirements for the program.**