Cleveland State University
College of Sciences and Health Professions
Bachelor of Science in Biology
CSUteach (license in Education)

| First Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| ASC 101: Intro to University Life | 1 |  |  | Intro | PHY 201: Astronomy: Stars \& Galaxies | 3 | x | x | NS |
| ENG 101: College Writing I | 3 |  |  | W/C | ENG 102: College Writing II | 3 |  |  | W/C |
| BIO 200/201: Introductory Biology I + Lab | 4 | x | x | NS | BIO 202/203: Introductory Biology II + Lab | 4 | x | x | NS |
| PSY 221: Adolescent Psychology | 3 |  | x | SS | CHM 261/266: General Chemistry I + Lab | 4 | x | $x$ | NS |
| MTH 181: Calculus I | 4 | x | x | M/QL | MTH 147: Statistical Concepts \& App | 3 | x | x | M/QL |
|  |  |  |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  | Semester Total | 17 |  |  |  |


| Second Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EUT 201: Step 1: Inquiry Approaches to Teaching | 1 |  | x |  | EDB 242: Introduction to Education | 3 |  | x |  |
| BIO 300/301: Plant Biology + Lab | 4 | x |  |  | BIO 304/305: Pop Biology \& Evolution + Lab | 4 | x | x |  |
| CHM 262/267: General Chemistry II + Lab | 4 | x | $x$ | NS | CHM 331/336: Organic Chemistry I + Lab | 4 | x |  |  |
| EVS 206: Intro to Envirnomental Science | 3 | x | x | NS | BIO 308/309: Cell Biology + Lab | 4 | x |  |  |
| Arts \& Humanities Elective (outside US**) | 3 |  |  | A\&H | EDC 300: Div in Edu Settings | 3 |  | x | DIV |
| Semester Total | 15 |  |  |  | Semester Total | 18 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EDB 302: Psychological Foundations of Education | 3 |  | x | WAC | EUT 305: Classroom Interactions | 3 |  | x |  |
| BIO 302/304: Animal Biology + Lab | 4 | x |  |  | BIO 306/307: Biochemistry + Recitation | 4 | x |  |  |
| PHY 221: College Physics I | 5 | x | x | NS | PHY 222: College Physics II | 5 | x | x | NS |
| GEO 100/101: Intro to Geology + Lab | 4 | x | x |  | Social Science Elective (outside US**) | 3 |  |  | SS |
| African American Experience Elective | 3 |  |  | DIV | ESE 400: Introduction to Speical Education | 3 |  | $x$ |  |
|  |  |  |  |  |  |  |  |  |  |
| Semester Total | 19 |  |  |  | Semester Total | 18 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EUT 417: Project Based Instruction in Science | 3 |  | $x$ |  | EST 499: CSUteach STEM Apprentice Teaching II | 6 |  | $x$ |  |
| EST 399: CSUteach STEM Apprentice Teaching I | 1 |  | x |  | EUT 210: Perspectives on Science \& Math | 3 |  | x | A H/WAC |
| SCI 311: Research Methods | 3 |  | x | WAC | CHM 255: Principles of Environmental Chemistry | 3 | x | x |  |
| BIO 310/311: Genetics + Recitation | 4 | x |  |  | BIO 495: Seminar | 2 | x |  | CAP/WAC |
| PHY 470: Environmental Physics | 3 | x | x |  | BIO 499: Exit Evaluation | 0 | x |  |  |
| EDL 305: Content Area Literacy | 3 |  | x |  | BIO 3xx/4xx: Elective | 3 | X |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |
| Semester Total | 17 |  |  |  | Semester Total | 17 |  |  |  |
| Degree Total: 131 |  |  |  |  |  |  |  |  |  |

Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency

## College/ Program Notes:

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.
*Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a minimum of $\mathbf{1 2 0}$ total credit hours, of which a minimum of 42 credit hours must be upper division ( 300 or 400 -level courses). Depending upon other elective choices made ( 3 credit hour vs. 4 credit hour courses), students may not need as many general electives as indicated above, or may need additional electives.
University Notes:

| Gen Ed Key: | SS = Social Sciences (two courses, one of which must be focused outside the US**) |
| :--- | :--- |
| INTRO = Introduction to University Life (one course) | A\&H = Arts \& Humanities (two courses, one must be focused outside the US**) |
| W/C = Writing/Composition (two courses; C or better required) | DIV = Social Diversity (two courses; one US Diversity and one African American Experience) |
| M/QL = Mathematics/Quantitative Literacy (two courses) | WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; Cor better req |
| NS = Natural Sciences (two courses, one of which must have a lab) | CAP = Capstone |
| ** of the SS and A\&H courses focused outside the US, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME) |  |

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## Cleveland State University

College of Sciences and Health Professions
Bachelor of Science in Chemistry
CSUteach (license in Education)


| Second Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EUT 201: Step 1: Inquiry Approaches to Teaching | 1 |  | x |  | EDB 242: Introduction to Education | 3 |  | x |  |
| CHM 331/336: Organic Chemistry I + Lab | 4 | x | x |  | CHM 332/337: Organic Chemistry II + Lab | 4 | X |  |  |
| BIO 202/203: Introductory Biology II + Lab | 4 | X | X | NS | BIO 304/305: Population Biology \& Ecology + Lab | 4 | x | x |  |
| EVS 206: Intro to Environmental Science | 3 | x | x | NS | MTH 147: Statistical Concepts \& App | 3 | x | x | M/QL |
| Arts \& Humanities Elective (outside US**) | 3 |  |  | A\&H | EDC 300: Div in Edu Settings | 3 |  | x | DIV |
| African American Experience Elective | 3 |  |  | DIV |  |  |  |  |  |
| Semester Total | 18 |  |  |  | Semester Total | 17 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester |  | Credits | Major | Minor | Gen Ed |
| EDB 302: Psychological Foundations of Education | 3 |  | x | WAC | EUT 305: Classroom Interactions |  | 3 |  | x |  |
| CHM 310/315: Survey of Analytical Chem + lab | 4 | x | x |  | PHY 201: Astronomy: Stars \& Galaxies |  | 3 | x | X | NS |
| PHY 221: College Physics I | 5 | x | X | NS | PHY 222: College Physics II |  | 5 | x | x | NS |
| GEO 100/101: Intro to Geology + Lab | 4 | x | x | NS | ESE 400: Introduction to Education |  | 3 |  | x |  |
| Social Science Elective (outside US**) | 3 |  |  | SS | CHM 320: Survey of Physical Chemistry |  | 3 | x | x |  |
| Semester Total | 19 |  |  |  |  | Semester Total | 17 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EUT 417: Project Based Instruction in Science | 3 |  | x |  | EST 499: CSUteach STEM Apprentice Teaching II | 6 |  | x |  |
| EST 399: CSUteach STEM Apprentice Teaching I | 1 |  | x |  | EUT 210: Perspectives on Science \& Math | 3 |  | x | A\&H/WAC |
| SCI 311: Research Methods | 3 |  | x | WAC | CHM 404: Environmental Chemistry | 3 | x | x |  |
| CHM 402: Biochemistry | 3 | x |  |  | CHM 472: Student Colloquium | 1 | x |  | CAP/WAC |
| PHY 470: Environmental Physics | 3 | x | x |  |  |  |  |  |  |
| EDL 305: Content Area Literacy | 3 |  | x |  |  |  |  |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |
| Semester Total | 16 |  |  |  | Semester Total | 13 |  |  |  |
| Degree Total: 130 |  |  |  |  |  |  |  |  |  |

## Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency

## College/ Program Notes

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.
*Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a minimum of $\mathbf{1 2 0}$ total credit hours, of which a minimum of 42 credit hours must be upper division ( 300 or 400 -level courses). Depending upon other elective choices made ( 3 credit hour vs. 4 credit hour courses), students may not need as many general electives as indicated above, or may need additional electives.
University Notes:

| Gen Ed Key: | SS = Social Sciences (two courses, one of which must be focused outside the US**) |
| :--- | :--- |
| INTRO = Introduction to University Life (one course) | A\&H = Arts \& Humanities (two courses, one must be focused outside the US**) |
| W/C = Writing/Composition (two courses; C or better required) | DIV = Social Diversity (two courses; one US Diversity and one African American Experience) |
| M/QL = Mathematics/Quantitative Literacy (two courses) | WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better req |
| NS = Natural Sciences (two courses, one of which must have a lab) |  |
|  | CAP of the SS and A\&H courses focused outside the US, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME) |

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| First Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| ASC 101: Intro to University Life | 1 |  |  | Intro | EDC 300: Div in Edu Settings | 3 |  | x | DIV |
| ENG 101: College Writing I | 3 |  |  | W/C | ENG 102: College Writing II | 3 |  |  | W/C |
| BIO 200/201: Introductory Biology I + Lab | 4 | x | x | NS | BIO 202/203: Introductory Biology II + Lab | 4 | x | x | NS |
| PSY 221: Adolescent Psychology | 3 |  | x | SS | EVS 206: Introduction to Environmental Science | 3 | x | x | NS |
| MTH 181: Calculus I | 4 | x | x | M/QL | MTH 147: Statistical Concepts \& App | 3 |  | x | M/QL |
|  |  |  |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  | Semester Total | 16 |  |  |  |


| Second Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EUT 201: Step 1: Inquiry Approaches to Teaching | 1 |  | $x$ |  | EDB 242: Introduction to Education | 3 |  | x |  |
| EVS 300/301: Phy Features of Ecosystem + Lab | 4 | x |  |  | EVS 302/303: Bio Features of Ecosytems + Lab | 4 | x |  |  |
| CHM 261/266: General Chemistry I + Lab | 4 | x | x | NS | CHM 262/267: General Chemistry II + Lab | 4 | x | x | NS |
| EVS 322/323: Geospatial Concepts \& Tools | 4 | x |  |  | Bio 304/305: Population Biology \& Evolution + Lab | 4 | x | x |  |
| African American Experience Elective | 3 |  |  | DIV | GEO 230: Natural Resources | 3 | x | x |  |
| Semester Total | 16 |  |  |  | Semester Total | 18 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EDB 302: Psychological Foundations of Education | 3 |  | x | WAC | EUT 305: Classroom Interactions | 3 |  | x |  |
| Planning Course (UST 435, 436, 441 or 442) | 3 | x |  |  | PHY 201: Astronomy: Stars \& Galaxies | 3 | x | x | NS |
| PHY 221: College Physics I | 5 | x | x | NS | PHY 222: College Physics II | 5 | x | x | NS |
| GEO 100/101: Intro to Geology + Lab | 4 | x | x | NS | Social Science Elective (outside US**) | 3 |  |  | SS |
| Arts \& Humanities Elective (outside US**) | 3 |  |  | A\&H | ESE 400: Introduction to Special Education | 3 |  | x |  |
|  |  |  |  |  |  |  |  |  |  |
| Semester Total | 18 |  |  |  | Semester Total | 17 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EUT 417: Project Based Instruction in Science | 3 |  | x |  | EST 499: CSUteach STEM Apprentice Teaching II | 6 |  | x |  |
| EST 399: CSUteach STEM Apprentice Teaching I | 1 |  | x |  | EUT 210: Perspectives on Science \& Math | 3 |  | x | A\&H/WAC |
| SCI 311: Research Methods | 3 |  | x | WAC | CHM 255: Enviromental Chemistry | 3 | x | x |  |
| Planning Course (UST 435, 436, 441 or 442) | 3 | x |  |  | EVS 490/496/497: Intern/Ind Study/Research | 4 | x |  | CAP/WAC |
| PHY 470: Environmental Physics | 3 | x | x |  | EVS 499: Exit Evaluation | 0 | x |  |  |
| EDL 305: Content Area Literacy | 3 |  | x |  |  |  |  |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |
| Semester Total | 16 |  |  |  | Semester Total | 16 |  |  |  |
| Degree Total: 132 |  |  |  |  |  |  |  |  |  |

Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency

## College/ Program Notes:

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.
*Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a minimum of $\mathbf{1 2 0}$ total credit hours, of which a minimum of 42 credit hours must be upper division ( 300 or $400-$ level courses). Depending upon other elective choices made ( 3 credit hour vs. 4 credit hour courses), students may not need as many general electives as indicated above, or may need additional electives.
University Notes:

| Gen Ed Key: | SS = Social Sciences (two courses, one of which must be focused outside the US**) |
| :---: | :---: |
| INTRO = Introduction to University Life (one course) | A\&H = Arts \& Humanities (two courses, one must be focused outside the US**) |
| $\mathrm{W} / \mathrm{C}=$ Writing/Composition (two courses; C or better required) | DIV = Social Diversity (two courses; one US Diversity and one African American Experience) |
| M/QL = Mathematics/Quantitative Literacy (two courses) | WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better req |
| NS = Natural Sciences (two courses, one of which must have a lab) | CAP = Capstone |

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| Second Year |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester |  | Credits | Major | Minor | Gen Ed |
| EUT 201: Step 1: Inquiry Approaches to Teaching | 1 |  | x |  | EDB 242: Introduction to Education |  | 3 |  | x |  |
| MTH 220: Discrete Mathematics | 3 | x | x |  | MTH 281: Multivariable Calculus |  | 4 | x | x |  |
| MTH 286:Differential Equations | 3 | x |  |  | MTH 288: Linear Algebra |  | 3 | x | x |  |
| Arts \& Humanities Elective (outside US**) | 3 |  |  | A\&H | General Elective |  | 3 |  |  |  |
| African American Experience Elective | 3 |  |  | DIV | EDC 300: Div in Edu Settings |  | 3 |  | x | DIV |
| General Elective | 3 |  |  |  |  |  |  |  |  |  |
| Semester Total | 16 |  |  |  |  | Semester Total | 16 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester |  | Credits | Major | Minor | Gen Ed |
| EDB 302: Psychological Foundations of Education | 3 |  | x | WAC | EUT 305: Classroom Interactions |  | 3 |  | x |  |
| MTH 301: Introduction to Number Theory | 3 | x | x |  | MTH 358: Abstract Algrebra |  | 3 | x | x | WAC |
| MTH 333: Geometry | 3 | x | x |  | MTH 4xx Elective |  | 3 | x |  |  |
| EDL 305: Content Area Literacy | 3 |  | x |  | MTH 201: Functions \& Modeling |  | 3 |  | x |  |
| MTH 323: Statistical Methods | 3 | x | x |  | ESE 400: Introduction to Special Education |  | 3 |  | x |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  |  | Semester Total | 15 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester |  | Credits | Major | Minor | Gen Ed |
| EUT 415: Project Based Instruction in Mathematics | 3 |  | x |  | EST 499: CSUteach STEM Apprentice Teaching II |  | 6 |  | x |  |
| EST 399: CSUteach STEM Apprentice Teaching I | 1 |  | x |  | EUT 210: Perspectives on Science \& Math |  | 3 |  | x | \&H/WAC |
| SCI 311: Research Methods | 3 |  | x | WAC | MTH 496: Senior Project |  | 3 | x |  | WAC/CAP |
| MTH 424: Probability Theory \& Application | 3 | x | x |  |  |  |  |  |  |  |
| MTH 396: Junior Seminar | 2 | x |  |  |  |  |  |  |  |  |
| MTH 4xx Elective | 3 | x |  |  |  |  |  |  |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  |  | Semester Total | 12 |  |  |  |
| Degree Total: 120 |  |  |  |  |  |  |  |  |  |  |

## Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency

## College/ Program Notes:

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University Notes:

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| :--- | :--- | :---: | :---: |
| INTRO = Introduction to University Life (one course) | A\&H = Arts \& Humanities (two courses, one must be focused outside the US**) |  |  |
| W/C = Writing/Composition (two courses; C or better required) | DIV = Social Diversity (two courses; one US Diversity and one African American Experience) |  |  |
| M/QL = Mathematics/Quantitative Literacy (two courses) | WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; Cor better r |  |  |
| NS = Natural Sciences (two courses, one of which must have lab) | CAP = Capstone |  |  |
| ** of the SS and A\&H courses focused outside the US, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME) |  |  |  |

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| First Year |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester |  | Credits | Major | Minor | Gen Ed | Spring Semester |  | Credits | Major | Minor | Gen Ed |
| ASC 101: Intro to University Life |  | 1 |  |  | Intro |  |  |  |  |  |  |
| ENG 101: College Writing I |  | 3 |  |  | W/C | ENG 102: College Writing II |  | 3 |  |  | W/C |
| Science Elective |  | 3 | x |  | NS | PHY 241/243/H: University Physics I |  | 5 | x |  | NS |
| PSY 221: Adolescent Psychology |  | 3 |  | x | SS | Social Science Elective (outside US**) |  | 3 |  |  | SS |
| MTH 181: Calculus I |  | 4 | x | x | M/QL | MTH 182: Calculus II |  | 4 | x | x | M/QL |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Semester Total | 14 |  |  |  |  | Semester Total | 15 |  |  |  |


| Second Year |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester |  | Credits | Major | Minor | Gen Ed |
| EUT 201: Step 1: Inquiry Approaches to Teaching | 1 |  | x |  | EDB 242: Introduction to Education |  | 3 |  | x |  |
| MTH 220: Discrete Mathematics | 3 | x | x |  | MTH 286: Differential Equations |  | 3 | x |  |  |
| MTH 281: Multivariable Calculus | 4 | x | x |  | MTH 288: Linear Algebra |  | 3 | x | x |  |
| Arts \& Humanities Elective (outside US**) | 3 |  |  | A\&H | Science Elective |  | 3 | x |  |  |
| PHY 242/244/H: University Physics II | 5 | x |  | NS | African American Experience Elective |  | 3 |  |  | DIV |
|  |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 16 |  |  |  |  | Semester Total | 15 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EDB 302: Psychological Foundations of Education | 3 |  | x | WAC | EUT 305: Classroom Interactions | 3 |  | x |  |
| MTH 301: Introduction to Number Theory | 3 | $x$ | x |  | MTH 358: Abstract Algrebra | 3 | x | $x$ | WAC |
| MTH 333: Geometry | 3 | x | x |  | MTH 4xx Elective | 3 | x |  |  |
| EDL 305: Content Area Literacy | 3 |  | x |  | MTH 201: Functions \& Modeling | 3 |  | x |  |
| MTH 323: Statistical Methods | 3 | x | x |  | Science Elective | 3 |  |  |  |
|  |  |  |  |  | ESE 400: Introduction to Special Education | 3 |  | x |  |
| Semester Total | 15 |  |  |  | Semester Total | 18 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| EUT 415: Project Based Instruction in Mathematics | 3 |  | x |  | EST 499: CSUteach STEM Apprentice Teaching II | 6 |  | x |  |
| EST 399: CSUteach STEM Apprentice Teaching I | 1 |  | x |  | EUT 210: Perspectives on Science \& Math | 3 |  | x | A\&H/WAC |
| SCI 311: Research Methods | 3 |  | x | WAC | MTH 496: Senior Project | 3 | x |  | WAC/CAP |
| MTH 424: Probability Theory \& Application | 3 | $x$ | x |  | General Elective | 3 |  |  |  |
| MTH 396: Junior Seminar | 2 | x |  |  |  |  |  |  |  |
| MTH 4xx Elective | 3 | x |  |  |  |  |  |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  | Semester Total | 15 |  |  |  |
| Degree Total: 123 |  |  |  |  |  |  |  |  |  |

Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency

## College/ Program Notes:

The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.
*Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a minimum of $\mathbf{1 2 0}$ total credit hours, of which a minimum of 42 credit hours must be upper division ( 300 or $400-$ level courses). Depending upon other elective choices made ( 3 credit hour vs. 4 credit hour courses), students may not need as many general electives as indicated above, or may need additional electives.
University Notes:

| Gen Ed Key: | SS = Social Sciences (two courses, one of which must be focused outside the US**) |
| :--- | :--- |
| INTRO = Introduction to University Life (one course) | A\&H = Arts \& Humanities (two courses, one must be focused outside the US**) |
| W/C = Writing/Composition (two courses; Cor better required) | DIV = Social Diversity (two courses; one US Diversity and one African American Experience) |
| M/QL = Mathematics/Quantitative Literacy (two courses) | WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better re |
| NS = Natural Sciences (two courses, one of which must have a lab) | CAP = Capstone |
| ** of the SS and A\&H courses focused outside the US, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME) |  |

This information is provided solely for the convenience of the reader, and the University expressly disclaims any liability which may otherwise be incurred. This publication is neither a contract nor an offer to make a contract. While every effort has been made to ensure the accuracy of the information, the University reserves the right to make changes at any time with respect to course offerings, degree requirements, services provided, or any other subject addressed herein.

Cleveland State University
College of Sciences and Health Professions
Bachelor of Science in Mathematics
CSUteach (minor in Physics, license in Education)


| Second Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credits | Major | Minor | Gen Ed |
| EUT 201: Step 1: Inquiry Approaches to Teaching | 1 |  | x |  | EDB 242: Introduction to Education | 3 |  | x |  | MTH 323: Statistical Methods | 3 | x | x |  |
| MTH 220: Discrete Mathematics | 3 | x | x |  | MTH 286: Differential Equations | 3 | x |  |  | EDC 300: Div in Edu Settings | 3 |  | x | DIV |
| MTH 281: Multivariable Calculus | 4 | x | x |  | MTH 288: Linear Algebra | 3 | x | x |  |  |  |  |  |  |
| EVS 206: Intro to Environmental Science | 3 |  | x | NS | MTH 201: Functions \& Modeling | 3 |  | x |  |  |  |  |  |  |
| PHY 242/244/H: University Physics II | 5 | x | x | NS | PHY 330: Modern Physics | 3 |  | x |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 16 |  |  |  | Semester Total | 15 |  |  |  | Semester Total | 6 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credits | Major | Minor | Gen Ed |
| EDB 302: Psychological Foundations of Education | 3 |  | x | WAC | EUT 305: Classroom Interactions | 3 |  | x |  | CHM 380: Prin of Chem Mid Sch Teachers | 3 |  | x |  |
| MTH 301: Introduction to Number Theory | 3 | x | x |  | MTH 358: Abstract Algrebra | 3 | x | x | WAC | BIO 380/381: Bio Content Mid Sch Teachers + Lab | 4 |  | x |  |
| MTH 333: Geometry | 3 | x | x |  | MTH 4xx Elective | 3 | x |  |  |  |  |  |  |  |
| African American Experience Elective | 3 |  |  | DIV | EDL 305: Content Area Literacy | 3 |  | x |  |  |  |  |  |  |
| PHY 470: Environmental Physics | 3 | x | x |  | ESE 400: Introductiont to Special Education | 3 |  | x |  |  |  |  |  |  |
|  |  |  |  |  | MTH 396: Junior Seminar | 2 | x |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  | Semester Total | 17 |  |  |  | Semester Total | 7 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credits | Major | Minor | Gen Ed |
| EUT 415: Project Based Instruction in Mathematics | 3 |  | x |  | EST 499: CSUteach STEM Apprentice Teaching II | 6 |  | x |  |  |  |  |  |  |
| EUT 417: Project Based Instruction in Science | 3 |  | x |  | EUT 210: Perspectives on Science \& Math | 3 |  | x | \&H/WAC |  |  |  |  |  |
| EST 399: CSUteach STEM Apprentice Teaching I | 1 |  | x |  | MTH 496: Senior Project | 3 | x |  | WAC |  |  |  |  |  |
| MTH 424: Probability Theory \& Application | 3 | x | x |  | MTH 4xx Elective | 3 | x |  |  |  |  |  |  |  |
| SCI 311: Research Methods | 3 |  | x | WAC |  |  |  |  |  |  |  |  |  |  |
| PHY 474: Thermal Physics | 4 | x | x | CAP |  |  |  |  |  |  |  |  |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 17 |  |  |  | Semester Total | 15 |  |  |  | Semester Total | 0 |  |  |  |
| Degree Total: 137 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency
137

## College/ Program Notes:

 although the M/QL and W/C requirements should be completed during the first year of study.
 ( 300 or 400 -level courses). Depending upon other elective choices made ( 3 credit hour vs. 4 credit hour courses), students may not need as many general electives as indicated above, or may need additional electives.

```
University Notes:
Gen Ed Key: SS = Social Sciences (two courses, one of which must be focused outside the US**)
INTRO = Introduction to University Life (one course)
W/C = Writing/Composition (two courses; C or better required)
M/QL = Mathematics/Quantitative Literacy (two courses)
A&H = Arts & Humanities (two courses, one must be focused outside the US**)
DIV = Social Diversity (two courses; one US Diversity and one African American Experience)
    WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better required)
NS = Natural Sciences (two courses, one of which must have a lab) CAP = Capstone
    ** of the SS and A&H courses focused outside the US, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME)
```

 While every effort has been made to ensure the accuracy of the information, the University reserves the right to make changes at any time with respect to course offerings, degree requirements, services provided, or any other subject addressed herein.

| First Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credit | Major | Minor | orsen Ed |
| ASC 101: Intro to University Life | 1 |  |  | Intro |  |  |  |  |  |  |  |  |  |  |
| ENG 101: College Writing I | 3 |  |  | W/C | ENG 102: College Writing II | 3 |  |  | w/c |  |  |  |  |  |
| BIO 200/201: Introductory Biology I + Lab | 4 | x | x | NS | BIO 202/203: Introductory Biology II + Lab | 4 | x | x | NS |  |  |  |  |  |
| PSY 221: Adolescent Psychology | 3 |  | x | SS | PHY 241/243/H: University Physics I* | 5 | x | x | NS |  |  |  |  |  |
| MTH 181: Calculus I | 4 | x | x | M/QL | MTH 182: Calculus II | 4 | x | x | M/QL |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  | Semester Total | 16 |  |  |  | Semester Total | 0 |  |  |  |


| Second Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credits | Major | Minor | Gen Ed |
| EUT 201: Step 1: Inquiry Approaches to Teaching | 1 |  | x |  | EDB 242: Introduction to Education | 3 |  | x |  | African American Experience Elective | 3 |  |  | DIV |
| PHY 242/244/H: University Physics II* | 5 | x | x | NS | PHY 330: Modern Physics | 3 | x | x |  | CIS 151: Invitation to Computing | 3 | x |  |  |
| CHM 261/266: General Chemistry I + Lab | 4 | x | x | NS | CHM 262/267: General Chemistry II + Lab | 4 | x | x | NS |  |  |  |  |  |
| MTH 281: Multivariable Calculus | 4 | x | x |  | PHY Elective: $3 \mathrm{xx} / 4 \mathrm{xx}$ | 3 | x |  |  |  |  |  |  |  |
| Arts \& Humanities Elective (outside US**) | 3 |  |  | A\&H | BIO 304/305: Population Biology \& Ecology + Lab | 4 | x | x |  |  |  |  |  |  |
| Semester Total | 17 |  |  |  | Semester Total | 17 |  |  |  | Semester Total | 6 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credit | Major | Minor | Gen Ed |
| EDB 302: Psychological Foundations of Education | 3 |  | x | WAC | EUT 305: Classroom Interactions | 3 |  | x |  | PHY 201: Astronomy: Stars \& Galaxies | 3 |  | x | NS |
| PHY Elective: 3xx/4xx | 3 | x |  |  | PHY Elective: $3 \mathrm{xx} / 4 \mathrm{xx}$ | 3 | x |  |  | MTH 147: Statistical Concepts with App | 3 |  | x | M/QL |
| PHY 470: Environmental Physics | 3 | x | x |  | PHY Elective: 3xx/4xx | 3 | x |  |  | EDC 300: Div in Edu Setting | 3 |  | x | DIV |
| GEO 100/101: Introduction to Geology + lab | 4 | x | x | NS | EVS 206: Intro to Environmental Science | 3 | x | $x$ | NS | EDL 305: Content Area Lite | 3 |  | $\times$ |  |
| CIS 260: Introduction to Programming | 4 | x |  |  | ESE 400: Introduction to Special Education | 3 |  | x |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 17 |  |  |  | Semester Total | 15 |  |  |  | Semester Total | 12 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | credit | Major | Minor | orsen Ed |
| EUT 417: Project Based Instruction in Science | 3 |  | x |  | EST 499: CSUteach STEM Apprentice Teaching II | 6 |  | $\times$ |  |  |  |  |  |  |
| EST 399: CSUteach STEM Apprentice Teaching I | 1 |  | x |  | EUT 210: Perspectives on Science \& Math | 3 |  | $x$ | \& $\mathrm{H} / \mathrm{WAC}$ |  |  |  |  |  |
| SCI 311: Research Methods | 3 |  | x |  | CHM 255: Environmental Chemistry | 3 | x | x |  |  |  |  |  |  |
| PHY Elective: 3xx/4xx | 3 | x |  |  | Social Sciences Elective (outside US**) | 3 |  |  | SS |  |  |  |  |  |
| PHY 474: Thermal Physics | 4 | x | x | CAP |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 14 |  |  |  | Semester Total | 15 |  |  |  | Semester Total | 0 |  |  |  |
| Degree Total: 144 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency

## College/ Program Notes:

 Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.
*Students must choose either PHY 243/H or PHY $244 / \mathrm{H}$ to meet WAC requirements. If one is not chosen, an additional WAC course will need to be added

 additional electives.

## University Notes:

| Gen Ed Key: | SS = Social Sciences (two courses, one of which must be focused outside the US**) |
| :--- | :--- |
| INTRO = Introduction to University Life (one course) | A\&H = Arts \& Humanities (two courses, one must be focused outside the US**) |
| W/C = Writing/Composition (two courses; C or better required) | DIV = Social Diversity (two courses; one US Diversity and one African American Experience) |
| M/QL = Mathematics/Quantitative Literacy (two courses) | WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better required) |
| NS = Natural Sciences (two courses, one of which must have a lab) | CAP = Capstone |
| $\quad$ ** of the SS and A\&H courses focused outside the US, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME) |  |


 services provided, or any other subject addressed herein.

| First Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credits | Major | Minor | Gen Ed |
| ASC 101: Intro to University Life | 1 |  |  | Intro |  |  |  |  |  |  |  |  |  |  |
| ENG 101: College Writing I | 3 |  |  | W/C | ENG 102: College Writing II | 3 |  |  | W/C |  |  |  |  |  |
| BIO 200/201: Intro to Biology I + Lab -OR- CHM 261/262: Gen Chem I + Lab | 4 | x | x | NS | BIO 202/203: Intro to Biology II + Lab -OR- CHM 262/267: Gen Chem II + Lab | 4 | x | x | NS |  |  |  |  |  |
| PSY 221: Adolescent Psychology | 3 |  | $x$ | SS | PHY 241/243/H: University Physics I | 5 | $x$ | x | NS |  |  |  |  |  |
| MTH 181: Calculus I | 4 | x | x | M/QL | MTH 182: Calculus II | 4 | x | x | M/QL |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  | Semester Total | 16 |  |  |  | Semester Total | 0 |  |  |  |


| Second Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credit | Major | Minor | Gen Ed |
| EUT 201: Step 1: Inquiry Approaches to Teaching | 1 |  | x |  | EDB 242: Introduction to Education | 3 |  | x |  | CIS 151: Invitation to Computing | 3 | x |  |  |
| PHY 242/244/H: University Physics II | 5 | x | x | NS | PHY 330: Modern Physics | 3 | x | x |  | MTH 323: Statistical Methods | 3 | x | x |  |
| EVS 206: Intro to Environmental Science | 3 | x | x | NS | MTH 288: Linear Algebra | 3 | x | x |  | EDC 300: Div in Edu Settings | 3 |  | x |  |
| MTH 281: Multivariable Calculus | 4 | x | x |  | PHY Elective: $3 \mathrm{xx} / 4 \mathrm{xx}$ | 3 | x |  |  | African American Experience | or 4 |  |  | DIV |
| PHY 470: Environmental Physics | 3 | x | x |  | MTH 220: Discrete Mathematics | 3 | x | x | SS |  |  |  |  |  |
| Semester Total | 16 |  |  |  | Semester Total | 15 |  |  |  | Semester Total | 12 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credit | Major | Minor | Gen Ed |
| EDB 302: Psychological Foundations of Education | 3 |  | x | WAC | EUT 305: Classroom Interactions | 3 |  | x |  | CHM 380: Prin of Chem Mid |  |  |  |  |
| PHY Elective: $3 \mathrm{xx} / 4 \mathrm{xx}$ | 3 | x |  |  | PHY Elective: $3 \mathrm{xx} / 4 \mathrm{xx}$ | 3 | x |  |  | Sch Teach -OR- BIO 380/381: | 3 or 4 | x | x |  |
| MTH 301: Introduction to Number Theory | 3 | x | x |  | MTH 358: Abstract Algebra | 3 | x | x | WAC | Bio Content Mid Sch Teach* |  |  |  |  |
| MTH 333: Geometry | 3 | x | x |  | MTH 201: Functions \& Modeling | 3 |  | x |  | EDL 305: Content Area Litere | 3 |  | x |  |
| CIS 260: Introduction to Programming | 4 | x |  |  | PHY Elective: $3 \mathrm{xx} / 4 \mathrm{xx}$ | 3 | x |  |  |  |  |  |  |  |
| PHY Elective: $3 \mathrm{xx} / 4 \mathrm{xx}$ | 3 | x |  |  | ESE 400: Introduction to Special Education | 3 |  | x |  |  |  |  |  |  |
| Semester Total | 19 |  |  |  | Semester Total | 18 |  |  |  | Semester Total | 6 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed | Summer Semester | Credit | Major | Minor | Gen Ed |
| EUT 415: Project Based Instruction in Mathematics | 3 |  | x |  | EST 499: CSUteach STEM Apprentice Teaching II | 6 |  | x |  |  |  |  |  |  |
| EUT 417: Project Based Instruction in Science | 3 |  | x |  | EUT 210: Perspectives on Science \& Math | 3 |  | x | \& H/WAC |  |  |  |  |  |
| EST 399: CSUteach STEM Apprentice Teaching I | 1 |  | x |  | Social Science Elective (outside US**) | 3 |  |  | SS |  |  |  |  |  |
| SCI 311: Research Methods | 3 |  | x | WAC | Arts \& Humanities Elective (outside US**) | 3 |  |  | A\&H |  |  |  |  |  |
| PHY 474: Thermal Physics | 4 | x | x | CAP |  |  |  |  |  |  |  |  |  |  |
| MTH 424: Probability Theory \& Application | 3 | x | x |  |  |  |  |  |  |  |  |  |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Semester Total | 17 |  |  |  | Semester Total | 15 |  |  |  | Semester Total | 0 |  |  |  |
| Degree Total: 149-150 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency

## College/ Program Notes:

 Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.
If a student chooses BIO 200/201 and BIO 202/203, he/she must choose CHM 380. It a student chooses CHM 262/266 and CHM 262.267, he/she must choose BIO 380/381.

 need additional electives.
University Notes:

| Gen Ed Key: | SS = Social Sciences (two courses, one of which must be focused outside the US**) |
| :--- | :--- |
| INTRO = Introduction to University Life (one course) | A\&H = Arts \& Humanities (two courses, one must be focused outside the US**) |
| W/C = Writing/Composition (two courses; C or better required) | DIV = Social Diversity (two courses; one US Diversity and one African American Experience) |
| M/QL = Mathematics/Quantitative Literacy (two courses) | WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better required) |
| NS = Natural Sciences (two courses, one of which must have a lab) | CAP = Capstone |

(two courses, one of which must have a lab)
WAC/SPAC = Writing/Speaking Across the Curriculum (three courses, one in the major; C or better required) CAP = Capstone
** of the SS and A\&H courses focused outside the US, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME)
 make a contract. While every effort has been made to ensure the accuracy of the information, the University reserves the right to make changes at any time with respect to course offerings, degree requirements, services provided, or any other subject addressed herein.

Cleveland State University
College of Liberal Arts and Social Sciences
Bachelor of Social Studies
CSUteach (license in Education)

| First Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| ENG 101: College Writing I | 3 |  |  | W/C | ENG 102: College Writing II | 3 |  |  | W/C |
| MTH 116: Quantitative Literacy | 3 |  |  | M/QL | MTH 117: Math App in the Real World | 3 |  |  | M/QL |
| ASC 101: Introduction to University Life | 1 |  |  | Intro | Natural Science Elective | 3 |  |  | NS |
| General Elective | 3 |  |  |  | Natural Science Elective Lab | 1 |  |  | NS lab |
| HIS 101: Western Civilization I | 3 | x |  | A\&H | PSY 101: Introduction to Psychology | 3 |  | x | SS |
| HIS 215: History of African-Americans to 1877 | 3 | x |  | DIV-AA | General Elective | 3 |  |  | CLASS |
| Semester Total | 16 |  |  |  | Semester Total | 16 |  |  |  |


| Second Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| Arts and Humanities Elective (not in HIS) | 3 |  |  | A\&H | HIS 112: United States History since 1877 | 3 | x |  |  |
| EDC 300: Diversity in Educational Settings | 3 |  | x | DIV-US | HIS 299: Introduction to Historical Studies | 3 | x |  |  |
| HIS 111: United States History to 1877 | 3 | x |  |  | ECN 202: Principles of Microeconomics | 3 | x |  |  |
| HIS 104: Modern World History | 3 | x |  | SS | HIS 200: Introduction to Geography | 3 | x |  |  |
| EUT 202: Step 1: Inquiry Approaches to teaching Humanities | 1 |  | x |  | EDB 242: Introduction to Education | 3 |  | x |  |
| PSC 111: American Government | 3 | x |  |  |  |  |  |  |  |
| Semester Total | 16 |  |  |  | Semester Total | 15 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| NonWestern Sequence, course \#1 of 3 | 3 | x |  |  | HIS 370: Historiography of World History | 3 | x |  |  |
| Interdisciplinary Sequence, course \#2, global | 3 | x |  |  | US History Sequence, Colonial/Revolutionary Era | 3 | x |  | WAC |
| Interdisciplinary Sequence, course \#1: ANT 275 or SOC 210 | 3 | x |  | SS/AALAME | EDL 305: Content Area Literacy | 3 |  | x |  |
| Natural Science Elective | 3 |  |  | NS | EUT 306: Classroom Interactions in Humanities | 3 |  | x |  |
| EDB 302: Psychological Foundations of Education | 3 |  | x | WAC | ESE 400: Introduction to Special Education | 3 |  | x |  |
|  |  |  |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  | Semester Total | 15 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| US History Sequence, \#3, 19th or 20th century | 3 | x |  |  | Non Western Sequence, \#3 | 3 | x |  |  |
| Interdisciplinary Sequence, \#3 | 3 | x |  |  | HIS 401: History Seminar | 3 | x |  | CAP/WAC |
| NonWestern Sequence, \#2 | 3 | x |  |  | EST 498: CSUteach Humanities Apprentice Teaching II | 6 |  | x |  |
| US History Sequence \#2, 19th or 20th century | 3 | x |  |  |  |  |  |  |  |
| EUT 416: Project-based Instruction in Secondary Social Studie | 3 |  | x |  |  |  |  |  |  |
| EST 398: CSUteach Humanities Apprentice Teaching I | 1 |  | x |  |  |  |  |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |
| Semester Total | 16 |  |  |  | Semester Total | 12 |  |  |  |
| 121 credit hours (120 minimum hours required for the degree) |  |  |  |  |  |  |  |  |  |

## Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency

College/Program notes: The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study. Assumes CLASS Foreign Language Requirement fulfilled.
The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.
*General Electives ensure that a student accumulates the minimum credit hour totals needed for graduation. Students must have a minimum of $\mathbf{1 2 0}$ total credit hours, of which a minimum of $\mathbf{4 2}$ credit hours must be upper division ( 300 or 400 -level courses). Depending upon other elective choices made, students may not need as many general electives as indicated above, or may need additional electives.

## University Notes:

| Gen Ed Key: | SS = Social Sciences Requirement (2 courses, one of which must be focused outside the US**) |
| :--- | :--- |
| INTRO = Introduction to University Life Requirement (one course) | A\&H = Arts \& Humanities Requirement (2 courses, one must be focused outside the US**) |
| W/C = Writing/Composition Requirement (two courses; C or better required) | DIV = Social Diversity Requirement (2 courses; one US Diversity and one African American Exp.) |
| M/QL = Mathematics/Quantitative Literacy Requirement (two courses) | WAC/SPAC = Writing/Speaking Across the Curriculum Requirement (3 courses, one in the major) |
| NS = Natural Sciences (two courses, one of which must have a lab) | CAP = Capstone Requirement |
| $* *$ of the SS and A\&H courses focused outside the US, one must be focused on Africa, Latin America, Asia or the Middle East (ALAAME) |  |

This information is provided solely for the convenience of the reader, and the University expressly disclaims any liability which may otherwise be incurred. This publication is neither a contract nor an offer to make a contract. While every effort has been made to ensure the accuracy of the information, the University reserves the right to make changes at any time with respect to course offerings, degree requirements, services provided, or any other subject addressed herein.

Cleveland State University

## College of Liberal Arts and Social Sciences

Bachelor of Arts in English
CSUteach (license in Education)

| First Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| ENG 101: College Writing I | 3 |  |  | W/C | ENG 102: College Writing II | 3 |  |  | W/C |
| MTH 116: Quantitative Literacy | 3 |  |  | M/QL | MTH 117: Math App in the Real World | 3 |  |  | M/QL |
| ASC 101: Introduction to University Life | 1 |  |  | Intro | Natural Science Elective | 3 |  |  | NS |
| General Elective | 3 |  |  |  | PSY 221: Adolescent Psychology | 3 |  | x | SS |
| COM 101: Principles of Communication or Gen. Elective | 3 |  |  | SS | A \& H elective (outside the US/ALAAME) | 3 |  |  | A\&H |
| Genereal Elective | 3 |  |  |  |  |  |  |  |  |
| Semester Total | 16 |  |  |  | Semester Total | 15 |  |  |  |


| Second Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| Social Science (outside the US/ALAAME) | 3 |  |  | SS | Natural Science Elective | 3 |  |  | NS |
| COM 226: Mass Media or COM 231: Evltn Mass Media | 3 | x |  |  | Natural Science Lab | 1 |  |  | NSL |
| ENG 240: Introduction to Poetry | 3 | x |  | WAC/A\&H | ENG 241: Introduction to Fiction | 3 | x |  | WAC |
| ENG 207: African-Amer. Literature or ENG 208: Womanism/Feminism or other DIV-AA elective | 3 |  |  | DIV-AA | ENG 242: Introduction to Drama | 3 | x |  | WAC |
| General Elective | 3 |  |  |  | EDC 300: Diveresity in Educational Settings | 3 |  | x | DIV-US |
| EUT 202: Step 1: Inquiry approaches to teaching humanities | 1 |  | x |  | EDB 242: Introduction to Education | 3 |  | x |  |
| Semester Total | 16 |  |  |  | Semester Total | 16 |  |  |  |


| Third Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| ENG 321: British Literature I | 3 | x |  |  | ENG 322: British Literature II | 3 | x |  |  |
| ENG 308: Comp Theory for Teachers | 3 | x |  |  | ENG 382: Canonicity | 3 | x |  |  |
| ENG 310: Intro English Language | 3 | x |  |  | ESE 400: Introduction to Special Education | 3 |  | x |  |
| EDB 302: Psychological Foundations of Education | 3 |  | x |  | EDL 305: Content Area Literacy | 3 |  | $x$ |  |
| EDL 313: Literature based Reading Methods for Adole | 3 |  | x |  | EUT 306: Classroom Interactions in Humanities | 3 |  | x |  |
|  |  |  |  |  |  |  |  |  |  |
| Semester Total | 15 |  |  |  | Semester Total | 15 |  |  |  |


| Fourth Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall Semester | Credits | Major | Minor | Gen Ed | Spring Semester | Credits | Major | Minor | Gen Ed |
| ENG 341: American Literature I | 3 | X |  |  | EST 498: CSUteach Humanities Apprentice Teaching II | 6 |  | x |  |
| ENG 315: Intro English Language | 3 | x |  |  | ENG 342: American Literature II | 3 | X |  |  |
| EUT 413: Inquiry based Instruction in English Language Arts | 3 |  | x |  | General Elective | 3 |  |  |  |
| EST 398: CSUteach Humanities Apprentice Teaching I | 1 |  | x |  |  |  |  |  |  |
| General Elective | 3 |  |  |  |  |  |  |  |  |
| ENG 495 senior seminar | 3 | x |  | CAP |  |  |  |  |  |
| Apply for Spring graduation prior to Sep 9th |  |  |  |  |  |  |  |  |  |
| Semester Total | 16 |  |  |  | Semester Total | 12 |  |  |  |
| 121 credit hours (120 minimum hours required for the degree) |  |  |  |  |  |  |  |  |  |

Assumptions: college-level readiness in MTH \& ENG; no Foreign Language Deficiency

 Language Requirement fulfilled.
The plan above is a suggested guide to ensure that all General Education, College, University, and Major requirements are met within 4 years of study. Students may deviate from the suggested placement of Gen Ed courses, although the M/QL and W/C requirements should be completed during the first year of study.

 may need additional electives.
University Notes:

| Gen Ed Key: | SS = Social Sciences Requirement (2 courses, one of which must be focused outside the US**) |
| :---: | :---: |
| INTRO = Introduction to University Life Requirement (one course) | A\&H = Arts \& Humanities Requirement (2 courses, one must be focused outside the US**) |
| W/C = Writing/Composition Requirement (two courses; C or better required) | DIV = Social Diversity Requirement (2 courses; one US Diversity and one African American Exp.) |
| $\mathrm{M} / \mathrm{QL}=$ Mathematics/Quantitative Literacy Requirement (two courses) | WAC/SPAC = Writing/Speaking Across the Curriculum Requirement (3 courses, one in the major) |
| NS = Natural Sciences (two courses, one of which must have a lab) | CAP = Capstone Requirement |
| ** of the SS and A\&H courses focused outside the US, one must be focused on | Latin America, Asia or the Middle East (ALAAME) |


 course offerings, degree requirements, services provided, or any other subject addressed herein.

