## EARTH AND SPACE SCIENCE (BS) - SECONDARY EDUCATION TRACK

Program Map with Pre-Calculus

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| First Year |  |  |
| Fall |  |  |
| ENGL 1101 | English Composition I (minimum grade of C) | 3 |
| MATH 1113 | Pre-Calculus (minimum grade of C) | 4 |
| Three credits will count in Area A and one credit will count in Area H |  |  |
| GEOL 1121 K | Introductory Geosciences I \& Lab (minimum grade of C) | 4 |
| Area B1 | COMM 1110 Public Speaking or foreign language 1001, 1002, 2001, 2002 | 3 |
| AREA W | PEDS Elective | 1 |
|  | Credit Hours | 15 |
| Spring |  |  |
| ENGL 1102 | English Composition II (minimum grade of C) | 3 |
| GEOL 1122 | Introductory Geo-sciences II: Historical Geology (minimum grade of C) | 3 |
| MATH 1131 | Calculus with Analytic Geometry I (minimum grade of C) | 4 |
| Three credits will count in Area D and one credit in Area H |  |  |
| UTCH 1201 | Step I: Inquiry Approaches to Teaching (minimum grade of C) | 1 |
| HIST 2111 or HIST 2112 | U. S. History to 1865 or U. S. History since 1865 | 3 |
| Area B2 | ITDS 1779 (2), LEAD 1705 (2), PERS 1506 (1; may be repeated with different topic), PERS 1507 (2) | 1 |
|  | Credit Hours | 15 |
| Second Year |  |  |
| Fall |  |  |
| CHEM 1211 | Principles of Chemistry I (minimum grade of C) | 3 |
| CHEM 1211L | Principles of Chemistry I Lab (minimum grade of C) | 1 |
| POLS 1101 | American Government | 3 |
| ATSC 1112 | Understanding the Weather (minimum grade of C) | 3 |
| Area E | World Culture | 3 |
| UTCH 1202 | Step II: Inquiry-Based Lesson Design (minimum grade of C ) | 1 |
| ASTR 1105 | Descriptive Astronomy: The Solar System (minimum grade of C) | 3 |
| ASTR 1105 is taught only in the fall |  |  |

## Spring

| CHEM 1212 | Principles of Chemistry II (minimum grade of C) | 3 |
| :---: | :---: | :---: |
| CHEM 1212L | Principles of Chemistry II Lab (minimum grade of C) | 1 |
| ATSC 5117 U | Global and Climate Change (minimum grade of C) | 3 |
| ATSC 5117 U is taught only in the spring |  |  |
| ENVS 1205K | Sustainability and the Environment (minimum grade of C ) | 4 |
| AREA C | Fine Arts | 3 |
| UTCH 2105 | Knowing and Learning in Mathematics and Science (minimum grade of C) | 3 |
|  | Credit Hours | 17 |
| Third Year |  |  |
| Fall |  |  |
| PHYS 1111 | Introductory Physics I (minimum grade of C) | 3 |
| PHYS 1311 | Introductory Physics I Lab (minimum grade of C) | 1 |
| AREA G2 | ASTR class (minimum grade of C) ${ }^{5}$ | 4 |
| AREA H | Program Elective (ENVS) (minimum grade of C) | 3 |
| UTCH 2203 | Step III: Technological and Pedagogical Content Knowledge (minimum grade of C ) | 3 |
| UTCH 2203 is a fall only course |  |  |
|  | Credit Hours | 14 |
| Spring |  |  |
| PHYS 1112 | Introductory Physics II (minimum grade of C) | 3 |
| PHYS 1312 | Introductory Physics II Lab (minimum grade of C) | 1 |
| AREA H | Elective (GEOL) (minimum grade of C) | 3-4 |
| Area C | Humanities | 3 |
| UTCH 3215 | Research Methods (minimum grade of C) | 3 |
| UTCH 3215 is a spring only course |  |  |
| UTCH 3205 | Classroom Interactions (minimum grade of C) | 3 |
|  | Credit Hours | -17 |

## Fourth Year

Fall

| UTCH 4205 | Inquiry-Based Instruction (minimum grade <br> of C) | 3 |
| :--- | :--- | ---: |
| AREA H | Program Elective (Natural Hazards) <br> (minimum grade of C) $^{9}$ | $3-4$ |
| AREA H | Program Elective (Bio-Geology) (minimum <br> grade of C) |  |
| Area E | Behavioral Science | $3-4$ |
| AREA H | Elective credits as needed (minimum grade <br> if C) | $3-0$ |
| PHED 1205 | Concepts of Fitness <br> or KINS 1106 | 3 |
|  | Credit Hours | 2 |

## Spring

UTCH 4485 Student Teaching

| UTCH 4795 | Student Teaching Seminar (minimum grade <br> of C) |
| :--- | :--- | :--- |
| SPED 4115 Teaching Math and Science to Exceptional <br> Learners (minimum grade of B; see note <br> below) <br> There is a recent rule change for certification from the  |  |
| GaPSC. As of July 1, 2019, students must make a B or |  |
| higher in the Exceptional Children's course. The course |  |
| could be any of the following depending on your major. |  |
| SPED 2256, EDCI 6228, KINS 4245, SPED 4115, PHED 6219 |  |
| This rule change will not affect your graduation but you |  |
| cannot become a certified educator with the state of |  |
| Georgia until you receive the grade of B or higher in this |  |
| course. |  |

NOTE: During student teaching, no courses other than those listed above should be taken.

| Credit Hours | 12 |
| :--- | ---: |
| Total Credit Hours | 123 |

- Please note: Many of these courses are only offered once a year, or once every $3-4$ semesters, and many of them have prerequisites. While you can rearrange the order in which you take your courses, you should consult with your advisor to ensure that you will be able to take the courses in a timely manner so that you do not delay your graduation. This course map has been arranged so that the most commonly required prerequisites are scheduled in year 1 and year 2 to maximize options later.
- The program map illustrates appropriate coursework for completing a degree within 4 years, provided that course grades allow for earned credit. Please consult with your advisor to determine when courses can be switched out with others and taken in a different semester or sequence than illustrated, since not all courses are offered every semester.
- The map is for illustrative purposes only and does not constitute a legal contract on the part of CSU since degree requirements or course offerings could change. As always, check with your advisor.
- Students must complete "Area A " (ENGL 1101 English Composition I, ENGL 1102 English Composition II, and MATH 1001 Quantitative Skills and Reasoning or higher) prior to reaching 30 hours and earn a "C" or higher in ENGL 1101 and 1102.
- As of Fall 2013, all undergraduate students are required each semester to meet the 2.0 institutional GPA standard for satisfactory academic progress.


## Program Map with with Calculus

| Course | Title | Credit <br> Hours |
| :--- | :--- | ---: |
| First Year |  | 3 |
| Fall | English Composition I (minimum grade of |  |
| ENGL 1101 | C) | 4 |
| MATH 1131 | Calculus with Analytic Geometry I <br> (minimum grade of C) |  |
| Area B1 | COMM 1110 Public Speaking or foreign <br> language 1001, 1002, 2001, 2002 | 3 |
| GEOL 1121K | Introductory Geosciences I \& Lab <br> (minimum grade of C) | 4 |


| AREA W | PEDS Elective |  |
| :---: | :---: | :---: |
|  | Credit Hours | 14 |
| Spring |  |  |
| ENGL 1102 | English Composition II (minimum grade of C) | 3 |
| GEOL 1122 | Introductory Geo-sciences II: Historical Geology (minimum grade of C) | 3 |
| MATH 1132 | Calculus with Analytic Geometry II (minimum grade of C ) | 4 |
| UTCH 1201 | Step I: Inquiry Approaches to Teaching (minimum grade of C) | 1 |
| $\begin{aligned} & \text { HIST } 2111 \\ & \quad \text { or HIST } 2112 \end{aligned}$ | U. S. History to 1865 or U. S. History since 1865 | 3 |
| Area B2 | ITDS 1779 (2), LEAD 1705 (2), PERS 1506 (1; may be repeated with different topic), PERS 1507 (2) | 1 |
|  | Credit Hours | 15 |

## Second Year

Fall

| CHEM 1211 | Principles of Chemistry I (minimum grade <br> of C) | 3 |
| :--- | :--- | ---: |
| CHEM 1211L | Principles of Chemistry I Lab (minimum <br> grade of C) | 1 |
| POLS 1101 | American Government |  |
| ATSC 1112 | Understanding the Weather (minimum <br> grade of C) | 3 |
| AREA E | World Culture | 3 |
| UTCH 1202 | Step II: Inquiry-Based Lesson Design <br> (minimum grade of C) | 3 |
| ASTR 1105 | Descriptive Astronomy: The Solar System <br> (minimum grade of C) | 1 |

ASTR 1105 is offered only in fall
Credit Hours 17

| Spring |  |  |
| :--- | :--- | ---: |
| CHEM 1212 | Principles of Chemistry II (minimum grade <br> of C) | 3 |
| CHEM 1212L | Principles of Chemistry II Lab (minimum <br> grade of C) | 1 |
| ATSC 5117U | Global and Climate Change (minimum <br> grade of C) | 3 |

ATSC 5117U is a spring only course

ENVS 1205K | Sustainability and the Environment |
| :--- | :--- |
| (minimum grade of C) |$\quad 4$

AREA C Fine Arts 3
UTCH 2105 Knowing and Learning in Mathematics and 3 Science (minimum grade of C)
Credit Hours17

Third Year
Fall
PHYS 1111 Introductory Physics I (minimum grade of 3

| PHYS 1311 | Introductory Physics I Lab (minimum grade <br> of C) | 1 |
| :--- | :--- | :--- |
| AREA G | ASTR class (minimum grade of C) | 4 |


| AREA H | Program Elective (ENVS) (minimum grade of C) | 3 |
| :---: | :---: | :---: |
| UTCH 2203 | Step III: Technological and Pedagogical Content Knowledge (minimum grade of C) | 3 |
| UTCH 2203 is a fall only course |  |  |
|  | Credit Hours | 14 |
| Spring |  |  |
| PHYS 1112 | Introductory Physics II (minimum grade of C) | 3 |
| PHYS 1312 | Introductory Physics II Lab (minimum grade of C) | 1 |
| AREA H | Program Elective (GEOL) (minimum grade of C) | 3-4 |
| Area C | Humanities Elective | 3 |
| UTCH 3215 | Research Methods (minimum grade of C) | 3 |
| UTCH 3215 is a spring only course |  |  |
| UTCH 3205 | Classroom Interactions (minimum grade of C) | 3 |
|  | Credit Hours | 16-17 |
| Fourth Year |  |  |
| Fall |  |  |
| UTCH 4205 | Inquiry-Based Instruction (minimum grade of C) | 3 |
| Area H | Program Elective (Natural Hazards) (minimum grade of C ) | 3 |
| Area H | Program Elective (Bio-Geology) (minimum grade of C) | 3 |
| Area E | Behavioral Science | 3 |
| AREA H | Program credits as needed (minimum grade of C) | 3-0 |
| PHED 1205 or KINS 1106 | Concepts of Fitness or Lifetime Wellness | 2 |
|  | Credit Hours | 17-14 |
| Spring |  |  |
| UTCH 4485 | Student Teaching | 9 |
| UTCH 4795 | Student Teaching Seminar (minimum grade of C) | 1 |
| SPED 4115 | Teaching Math and Science to Exceptional Learners (minimum grade of $B$; see note below) | 2 |
| There is a recent rule change for certification from the GaPSC. As of July 1, 2019, students must make a B or higher in the Exceptional Children's course. The course could be any of the following depending on your major. SPED 2256, EDCI 6228, KINS 4245, SPED 4115, PHED 6219 This rule change will not affect your graduation but you cannot become a certified educator with the state of Georgia until you receive the grade of $B$ or higher in this course. |  |  |
| Note: During student teaching, no courses other than those listed above should be taken. |  |  |
|  | Credit Hours | 12 |
|  | Total Credit Hours | 122-120 |

[^0] once every 3-4 semesters, and many of them have prerequisites.

While you can rearrange the order in which you take your courses, you should consult with your advisor to ensure that you will be able to take the courses in a timely manner so that you do not delay your graduation. This course map has been arranged so that the most commonly required prerequisites are scheduled in year 1 and year 2 to maximize options later.

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[^0]:    - Please note: Many of these courses are only offered once a year, or

