**STEM ENDORSEMENT**

**DLA:** Yes

**NAME:** **GRADE:** 9 10 11 12

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **FHSP** | **PART 1** | **PART 2** | **ALT** | **NOTES** |
| **ENGLISH** | 4 |   |
|  English 1 |  |   |   | **STAAR**: I II III |
|  English 2 |  |   |   | **STAAR**: I II III |
|  English 3 |  |   |   |   |
|  4th English  |  |  |  | Advanced Course |
| 4th English: English IV; IS English; Literary Genres; Creative Writing; Humanities; Communication Applications; Debate III; Oral Interpretation III; IS Speech; IS Journalism; Newspaper III, Yearbook III; AP English Literature & Composition; Dual Credit; or College Prep English. |
| **MATH** | 4 |   |
|  Algebra I |   |   |   | **STAAR**: I II III |
|  Geometry |   |   |   |   |
|  Algebra II |   |   |   |   |
|  4th Math |  |  |  | Advanced Course |
| 4th Math: Precalculus; Independent Study Math; Advanced Quantitative Reasoning; AP Statistics; College Prep Math; or Dual Credit. |
| **SCIENCE** | 4 |   |
|  Biology |   |   |   | **STAAR**: I II III |
|  Chemistry |   |   |   | Advanced Course |
|  Physics |   |   |   | Advanced Course |
|  4th Science |  |  |  | Advanced Course |
| 4th Science: Aquatic, Astronomy, Earth & Space; Environmental Systems; AP Biology; AP Chemistry; AP Physics 1; AP Physics 2; AP Physics C; AP Environmental; Adv Animal; Anatomy & Physiology; Pathophysiology; Food Science; Forensic Science; Adv Biotechnology; Scientific Research & Design; Engineering Design & Problem Solving; EDD; Principles of Engineering; or Dual Credit. |
| **SOCIAL** **STUDIES** | 3 |   |
|  W Geog/W History |   |   |   |   |
|  US History |   |   |   | **STAAR**: I II III |
|  US Government |   |   |   |   |
|  Economics |   |   |   |   |
| **LOTE** | 2 |   |
|  SP FR LN GR CH ASL |   |   |  |   |
|   SP FR LN GR CH ASL |   |   |  |   |
| Sub for 2nd credit: W Geography, W History, or LOTE; ARD/504 Sub for both credits: ELA/Math/Science/Social Studies or CTE/Tech App’s |
| **PHYSICAL** **ED** | 1 |   |
|   |   |   |   |   |
| Foundations; Aerobics; Individual/Team Sports; Athletics; Band; Dance Team; Dance/PE; JROTC; or Alt PE Waiver |
| **FINE** **ARTS** | 1 |   |   |   |   |
| Art; AP Art; AP Art History; Band; Choir; Dance; Dance Team; Floral Design; Music Theory; AP Music Theory; Orchestra; or Theatre |

**ENDORSEMENT REQUIREMENTS AND ELECTIVES**

|  |  |  |  |
| --- | --- | --- | --- |
| STEM A – CTE(\*Advanced CTE3rd or 4th Course) | STEM B – MATH | STEM C – SCIENCE | STEM D – COMBO (no more than 2 categories; may include AP Comp Sci) |
| CTE 1: | Math 5: | Science 5: | STEM Combo 1: |
| CTE 2: | Elective 1: | Elective 1: | STEM Combo 2: |
| CTE 3\*: | Elective 2: | Elective 2: | STEM Combo 3: |
| CTE 4\*: | Elective 3: | Elective 3: | Elective 1: |
| Elective 1: | Elective 4: | Elective 4: | Elective 2: |
| Elective 2: | Elective 5: | Elective 5: | Elective 3: |
| Elective 3: | Elective 6: | Elective 6: | Elective 4: |

**ADDITIONAL CREDITS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **TOTAL CREDITS** | **9** | **10** | **11** | **12** |
|  |  | **SUBTOTAL** |  |  |  |  |
|  |  | **CUMULATIVE** |  |  |  |  |

**CTE Career Cluster:** STEM

**STEM A – CTE**

(A coherent sequence of courses for four or more credits in CTE, including at least one advanced CTE course)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Course #** | **Course Name** | **State #** | **Duration** | **Credit(s)** | **AAR** | **GPA** | **ADV** |
| 7900 | INTRODUCTION TO ENGINEERING DESIGN AA | N1303742 | YR | 1 | CTE | 1 |  |
| 7902 | GATEWAY TO ENGINEERING I | N1303756 | SM | 0.5 | CTE | n/a |  |
| 7903 | GATEWAY TO ENGINEERING II | N1303758 | SM | 0.5 | CTE | n/a |  |
| 7910 | PRINCIPLES OF ENGINEERING AA | N1303743 | YR | 1 | CTE | 1 | YES |
| 7911 | DIGITAL ELECTRICS AA | N1303744 | YR | 1 | CTE | 1 | YES |
| 7920 | ARCHITECTURE & ENGINEERING AA | N1303747 | YR | 1 | CTE | 1 | YES |
| 7921 | AEROSPACE ENGINEERING AA | N1303745 | YR | 1 | CTE | 1 | YES |
| 7930 | ENGINEERING DESIGN & PROBLEM SOLVING | 13037300 | YR | 1 | SCI | 2 | YES |
| 7940 | ENGINEERING DESIGN & DEVELOPMENT AA | 13037300 | YR | 1 | SCI | 1 | YES |
| 7951 | FORENSIC SCIENCE | 13029500 | YR | 1 | SCI | 2 | YES |
| 7961 | BIOTECHNOLOGY AA | 13036300 | YR | 1 | CTE | 1 |  |
| 7963 | ADVANCED BIOTECHNOLOGY AA | 13036400 | YR | 1 | SCI | 1 | YES |
| 7970 | BROADBAND COMMUNICATIONS I | 13036800 | YR | 2 | CTE | 2 | YES |
| 7971 | BROADBAND COMMUNICATIONS II | 13036900 | YR | 2 | CTE | 2 | YES |
| 7990 | PRACTICUM IN BIOTECHNOLOGY | 13037410 | YR | 2 | CTE | 2 | YES |

**STEM B – MATH**

(Three credits in mathematics by successfully completing Algebra II and two additional mathematics courses for which Algebra II is a prerequisite)

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| **Course #** | **Course Name** | **State #** | **Duration** | **Credit(s)** | **AAR** | **GPA** | **ADV** |
| 2211/2214 | ALGEBRA II/SHELTERED | 03100600 | YR | 1 | MTH | 2 | YES |
| 2221 | ALGEBRA II PAPG | 03100600 | YR | 1 | MTH | 1 | YES |
| 2212 | IS COLLEGE ALGEBRA DUAL CREDIT | 03102500 | SM | 0.5 | MTH | n/a | YES |
| 2216 | IS: FINITE MATH DUAL CREDIT | 03102501 | SM | 0.5 | MTH | n/a | YES |
| 2311 | PRECALCULUS | 03101100 | YR | 1 | MTH | 2 | YES |
| 2312 | PRECALCULUS DUAL CREDIT | 03101100 | SM | 1 | MTH | n/a | YES |
| 2314 | PRECALCULUS SHELTERED | 03101100 | YR | 1 | MTH | 2 | YES |
| 2321 | PRECALCULUS PAPG | 03101100 | YR | 1 | MTH | 1 | YES |
| 2322 | PRECALCULUS PAPG SHELTERED | 03101100 | YR | 1 | MTH | 1 | YES |
| 2400 | IS MATH: CALCULUS | 03102500 | YR | 1 | MTH | 2 | YES |
| 2421 | CALCULUS AB APG | A3100101 | YR | 1 | MTH | 1 | YES |
| 2521 | CALCULUS BC APG | A3100102 | YR | 1 | MTH | 1 | YES |
| 2621 | STATISTICS APG | A3100200 | YR | 1 | MTH | 1 | YES |
| 2731 | ADVANCED QUANTITATIVE REASONING | 03102510 | YR | 1 | MTH | 2 | YES |
| 2734 | ADVANCED QUANTITATIVE REASONING SHELTERED | 03102510 | YR | 1 | MTH | 2 | YES |
| 2999 | IS: MATH AA | 03102500 | SM | 0.5 | MTH | 1 | YES |

**STEM C – SCIENCE**

(Four credits in science by successfully completing Chemistry, Physics and two additional science courses)

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Course #** | **Course Name** | **State #** | **Duration** | **Credit(s)** | **AAR** | **GPA** | **ADV** |
| 3211/3214 | CHEMISTRY/SHELTERED | 03040000 | YR | 1 | SCI | 2 | YES |
| 3221 | CHEMISTRY PAPG | 03040000 | YR | 1 | SCI | 1 | YES |
| 3611 | PHYSICS | 03050000 | YR | 1 | SCI | 2 | YES |
| 3321 | BIOLOGY APG | A3010200 | YR | 1 | SCI | 1 | YES |
| 3521 | CHEMISTRY APG | A3040000 | YR | 1 | SCI | 1 | YES |
| 3631 | PHYSICS 1 APG |  | YR | 1 | SCI | 1 | YES |
| 3641 | PHYSICS 2 APG |  | YR | 1 | SCI | 1 | YES |
| 3723 | PHYSICS C APG | A3050002 | YR | 1 | SCI | 1 | YES |
| 3801 | EARTH & SPACE SCIENCE | 03060200 | YR | 1 | SCI | 2 | YES |
| 3811 | ENVIRONMENTAL SYSTEMS | 03020000 | YR | 1 | SCI | 2 | YES |
| 3814 | ENVIRONMENTAL SYSTEMS SHELTERED | 03020000 | YR | 1 | SCI | 2 | YES |
| 3821 | ENVIRONMENTAL SCIENCE APG | A3020000 | YR | 1 | SCI | 1 | YES |
| 3831 | AQUATIC SCIENCE | 03030000 | YR | 1 | SCI | 2 | YES |
| 3834 | AQUATIC SCIENCE SHELTERED | 03030000 | YR | 1 | SCI | 2 | YES |
| 3851 | ASTRONOMY | 03060100 | YR | 1 | SCI | 2 | YES |
| 3861 | SCIENTIFIC RESEARCH & DESIGN | 13037200 | YR | 1 | SCI | 2 | YES |
| 7021 | ADVANCED ANIMAL SCIENCE | 13000700 | YR | 1 | SCI | 2 | YES |
| 7530 | PATHOPHYSIOLOGY | 13020800 | YR | 1 | SCI | 2 | YES |
| 7550 | ANATOMY & PHYSIOLOGY | 13020600 | YR | 1 | SCI | 2 | YES |
| 7551 | ANATOMY & PHYSIOLOGY AA | 13020600 | YR | 1 | SCI | 1 | YES |
| 7620 | FOOD SCIENCE | 13023000 | YR | 1 | SCI | 2 | YES |
| 7930 | ENGINEERING DESIGN & PROBLEM SOLVING | 13037300 | YR | 1 | SCI | 2 | YES |
| 7940 | ENGINEERING DESIGN DEVELOPMENT AA | 13037300 | YR | 1 | SCI | 1 | YES |
| 7951 | FORENSIC SCIENCE | 13029500 | YR | 1 | SCI | 2 | YES |
| 7963 | ADVANCED BIOTECHNOLOGY AA | 13036400 | YR | 1 | SCI | 1 | YES |
| 7997 | SCIENTIFIC RESEARCH & DESIGN | 13037210 | YR | 1 | SCI | 2 | YES |
| 7999 | IS: SCIENTIFIC RESEARCH & DESIGN AA | 13037210 | YR | 1 | SCI | 1 | YES |

**STEM D – COMBINATION**

(A coherent sequence of three credits from no more than two of the categories represented A, B, or C.

AP Computer Science may be combined with one additional category A, B, or C)