*Note before completing this proposal that all core courses for a new program or certificate must have already been reviewed (or submitted for the same meeting) by the Curriculum Committee and approved by the Provost and Vice President of Academic Affairs. In addition, the complete catalog page must be included at the end of this document.*

|  |  |
| --- | --- |
| **School or Division** | School of Pure and Applied Sciences |
| **Proposed by (faculty only)** | Jonathan McKenzieElizabeth Schott |
| **Presenter (faculty only)** | Elizabeth Schott |
| Note that the presenter (faculty) listed above must be present at the Curriculum Committee meeting or the proposal will be returned to the School or Division and must be submitted for a later date. |
| **Submission date** | 2/5/2016 |

**Section I, New Program or Certificate Information (must complete all items)**

|  |  |
| --- | --- |
| **List new program or certificate**  | Science and Engineering Technology, AS degree |
| **Describe (below) the process by which the need for the new program or certificate was identified** |
| Looking at the Workforce Region 24 data, there will be over 180 openings for graduates with scientific laboratory skills over the next 6 years in occupations for students with this Associate’s Degree. Add to this the number of students who decide on a STEM career after obtaining a degree and need higher level math and science classes in order to pursue the baccalaureate degree at the four-year schools or those students who decide to obtain an AS as well as an AA degree, and there is significant potential demand for this program.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 2014 - 2022 |  Total JobOpenings\* | AverageHourlyWage ($)\*\* |  Education Level |
|  Occupation  | Employment  | LevelChange | PercentChange |
| Code |  Title | 2014 | 2022 |
| 194021 | Biological Technicians | 38 | 38 | 0 | 0.0 | 10 | 18.75 | Associate Degree |
| 194031 | Chemical Technicians | 42 | 44 | 2 | 4.8 | 7 | 19.33 | Associate Degree |
| 194091 | Environmental Science Technicians, Including Health | 107 | 132 | 25 | 23.4 | 61 | 18.25 | Postsecondary Vocational |
| 194092 | Forensic Science Technicians | 72 | 82 | 10 | 13.9 | 34 | 21.46 | Postsecondary Vocational |
| 194093 | Forest and Conservation Technicians | 31 | 34 | 3 | 9.7 | 13 | 20.57 | Postsecondary Vocational |
| 194099 | Life, Physical, and Social Sci. Techs, All Other | 124 | 139 | 15 | 12.1 | 57 | 17.77 | Associate Degree |
| **Total** | **182** |  |

 |
| **Project (below) average enrollment for core courses** |
| A minimum average enrollment of 20.8 is expected for core classes; higher averages would be expected since many of the classes are already being offered at the college, often at maximum occupancy. |
| **Describe (below) how this projection was determined** |
| The 2015-16 enrollment in General or College Physics II and General Biology II were used as indicators of students who would complete the course work in two of the program’s five options, since the students enrolled in these classes would most likely complete this degree program. Students taking classes in the other options may be taking those classes for other degrees (e.g. HUN1201, nursing; MAN2021, business). While General or College Physics II and General Biology II may be taken as part of an AA degree, many students may decide to obtain the AS as well as the AA before they transfer. Given this assumption, and noting that the average enrollment in these classes during Fall 2015 was 24.0 and Spring 2016 was 19.4, the average class size was calculated to be 20.8. |
| **List (below) similar programs or certificates at other colleges and universities** |
| Chemical Technology AS Degree – Eastern Florida State College |

**Section II, Personnel and Resources Needed** (add rows if necessary)

|  |  |  |
| --- | --- | --- |
| **Faculty position(s) (List discipline)** | **Full time or adjunct?** | **Total annual expenses** |
| None |  |  |
| **Staff position(s) (List title)** | **Full time or part time?** | **Total annual expenses** |
| None |  |  |
| **Describe (below) library resources needed to support this program or certificate. Explain rationale for response, even if answer is none** |
| The College already offers all the courses with the exception of two new Engineering courses (Statics and Dynamics) and one Courses in Earth Science. The College already offers a course in Introduction to Engineering and courses related to Earth Science (Oceanography, Earth Science, and Environmental Science) and so already has access to databases and has texts that support these courses. Some new text, particularly the adopted textbooks, will be needed. |
| **Describe (below) the technology, facilities, laboratory, or other resources needed to support this program or certificate** |
| The College has all the equipment to teach the courses in the program. |
| **List (below) the estimated annual amount required for educational materials and supplies or other operating expenses for implementation of the new program or certificate** |
| No additional operating expenses. |
| **Identify (below) the funding source to be used for personnel and operating expenses** |
| Not Applicable. |

**Section III, Justification for proposal**

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| --- |
| **Provide justification (below) for this proposed curriculum action**  |
| This degree will support both students who wish to enter a career as a laboratory technician and those who plan to transfer to a four-year school to complete their bachelor’s degree, especially those who decide upon a STEM career after obtaining a degree. |

**Section IV, Important Dates and Endorsements Required**

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| --- |
| **List all faculty endorsements below. (Note that proposals will be returned to the School or Division if faculty endorsements are not provided).** |

|  |  |  |  |
| --- | --- | --- | --- |
| Cindy QuehlDonald RansfordDonald WarrenDouglas MagomoElizabeth SchottGabriel GaidosGeorge Manacheril | Helen Joan Van GlabekeIvana IlicJaime ZlatkinJay KoepkeJoseph RolesJuan Zaragoza | Kurt DonaldsonLisa Ann McGarityMarjorie Thrall MollerMichael WittyRobert FurlerRoy Hepner | Rozalind JesterTerry ZamorVera VergaWilliam WilcoxYadab Paudel |

**nOTE:** Changes for the Fall 2016 term must be submitted to the Dropbox by the February 5, 2016 deadline and approved no later than the March 4, 2016 Curriculum Committee meeting. Changes during mid-school year are NOT permitted. Extreme circumstances will require approval from the appropriate Dean or Associate Vice President as well as the Provost and Vice President of Academic Affairs to begin in either the Spring 2016 or Summer 2016 term.

|  |  |
| --- | --- |
| **Term in which approved action will take place** | Fall 2016 |
| **Exception to term (other than Fall 2016)** | Choose an item. |
| **Provide an explanation below for the requested exception to the Fall 2016 effective date.** |
| Type in the explanation for exception to Fall 2016 start date here. |

|  |  |  |
| --- | --- | --- |
| **Required Endorsements** | **Type in Name** | **Select Date** |
| **Department Chair or Program Coordinator/Director** | George Manacheril | 2/4/2016 |
| **Academic Dean or Associate Vice President** | Martin McClinton | 2/4/2016 |

|  |  |
| --- | --- |
| **Select Curriculum Committee Meeting Date** | March 4, 2016 |

Completed curriculum proposals must be uploaded to Dropbox by the deadline. Please refer to the *Curriculum Committee Calendar* document available in the document manager in the FSW Portal:

* Document Manager
* VP Academic Affairs
* Curriculum Process Documents

**Important Note to Faculty, Department Chairs or Program Coordinators, and Deans or an Associate Vice President:**

Incomplete proposals or proposals requiring corrections will be returned to the School or Division. If a proposal is incomplete or requires multiple corrections, the proposal will need to be completed or corrected and **resubmitted to the Dropbox for the next Curriculum Committee meeting**. All Curriculum proposals require approval of the Provost and Vice President of Academic Affairs. Final approval or denial of a proposal is reflected on the completed and signed Summary Report.

***Include complete new catalog page below.***

|  |  |  |
| --- | --- | --- |
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| --- |
| **Science and Engineering Technology, AS Degree** |
|  |

http://catalog.fsw.edu/return.gif Return to: [Programs of Study](http://catalog.fsw.edu/content.php?catoid=8&navoid=463)**Purpose**The Associate in Science (AS) in Science and Engineering Technology program offers a sequence of courses that presents coherent and rigorous content needed to prepare for employment and/or promotion in occupations where a general knowledge of scientific and/or engineering methodologies are required. It also prepares students for entry into a variety of baccalaureate degree programs in related disciplines such as Biological Sciences, Engineering, Chemistry, Physics, and Environmental Science.The content includes the communication and critical thinking skills essential for any employee, the fundamental procedures found in a scientific laboratory, and the scientific background of those procedures. Students will be able to specialize through program options in biological, chemical, environmental, and physical science, or may decide to study basic business concepts. Program electives support the students’ studies (e.g. Trigonometry for those students wishing to take College Physics) and allow students to expand their understanding of other scientific disciplines.**Program Structure**This program is a planned sequence of instruction consisting of 64 credit hours in the following areas: 18 credit hours of General Education Requirements, 15 credit hours of scientific and engineering Core Requirements, 15-19 credit hours of specialty Option coursework, and 12-17 credits hours of Technical Electives. The Scientific Workplace Preparation Certificate is a 26 credit hour certificate that prepares students for entry into employment and is comprised of core courses in the AS Science and Engineering Technology degree. As such, it can be earned before the student has earned the AS Science and Engineering Technology degree.**Course Prerequisites*****Many courses require prerequisites.*** Check the description of each course in the list below to check for prerequisites, minimum grade requirements, and other restrictions related to the course. Students must complete all prerequisites for a course prior to registering for it.**Graduation**Students must fulfill all requirements of their program major, after which students must complete an application for graduation through the Office of the Registrar. Students must apply for graduation ***by the published deadline***to be assured of final clearance for graduation, timely receipt of their diploma, and participation in the commencement ceremony. |

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| **General Education Requirements: 18 Credit Hours** |

* [ENC 1101 - Composition I](http://catalog.fsw.edu/preview_program.php?catoid=8&poid=348&returnto=463)**,** **3 credits**
* [ENC 1102 - Composition II](http://catalog.fsw.edu/preview_program.php?catoid=8&poid=348&returnto=463), **3 credits**
* [SPC 1017 - Fundamentals of Speech Communication](http://catalog.fsw.edu/preview_program.php?catoid=8&poid=348&returnto=463), **3 credits**

**OR**

* [SPC 2608 - Introduction to Public Speaking](http://catalog.fsw.edu/preview_program.php?catoid=8&poid=348&returnto=463), **3 credits**
* Any General Education Humanities Course ([PHI 2600](http://catalog.fsw.edu/preview_program.php?catoid=8&poid=346&returnto=463#tt3076) Ethics is recommended), **3 credits**
* Any General Education Mathematics Course ([MAC 1105](http://catalog.fsw.edu/preview_program.php?catoid=8&poid=348&returnto=463#tt6541) -College Algebra or [STA 2023](http://catalog.fsw.edu/preview_program.php?catoid=8&poid=348&returnto=463#tt3157) -Statistical Methods I recommended), **3 credits**
* Any General Education Social Sciences Course ([ECO 2023](http://catalog.fsw.edu/content.php?filter%5B27%5D=ECO&filter%5B29%5D=&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=8&expand=&navoid=462&search_database=Filter) – Principles of Microeconomics recommended), **3 credits**

## Science and Engineering Technology, AS Degree Common Core Requirements: 15 Credit Hours

* [BSC 1010 - Biological Science I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6093), **3 credits**
* [BSC 1010L - Biological Science I Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6095), **1 credit**
* [CHM 2045 - General Chemistry I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6117), **3 credits**
* [CHM 2045L - General Chemistry I Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6123), **1 credit**
* [CHM 2046 - General Chemistry II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6118), **3 credits**
* [CHM 2046L - General Chemistry II Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6124), **1 credit**
* [CGS 1000 - Computer Literacy](http://catalog.fsw.edu/preview_program.php?catoid=8&poid=346&returnto=463), 3 credits (or CLEP CGS 1077 -**3 transfer credits**)

**OR**

[CGS 1100 - Computer Applications for Business](http://catalog.fsw.edu/preview_program.php?catoid=8&poid=346&returnto=463)

**OR**

**Any computer course with a CGS, CIS, COP, or CTS course, 3 credits**

## Laboratory Science Option: 16 credits

Complete 2 of the 3 science areas listed below

 **Biology**

* [BSC 1011 - Biological Science II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6094), **3 credits**
* [BSC 1011L - Biological Science II Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6096), **1 credit**
* 4 Credits of Science coursework with BSC, MCB,OCB prefixes or 4 credits of Math coursework with MAC prefix

**Chemistry**

* + [CHM 2210 - Organic Chemistry I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6119)**4 credits**
	+ [CHM 2210L - Organic Chemistry I Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6125)**, 1 credit**
	+ [CHM 2211 - Organic Chemistry II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6120)**4 credits**
	+ [CHM 2211L - Organic Chemistry II Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6126)**, 1 credit**

**Physics**

* [PHY 2048 - General Physics I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6771)**4 credits**
* [PHY 2048L - General Physics I Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6776)**, 1 credit**
* [PHY 2049 - General Physics II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6772)**4 credits**
* [PHY 2049L - General Physics II Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6777)**, 1 credit**

**OR**

* [PHY 2053 - College Physics I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6773)**4 credits**
* [PHY 2053L - College Physics I Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6778)**, 1 credit**
* [PHY 2054 - College Physics II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6774)**4 credits**
* [PHY 2054L - College Physics II Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6779)**, 1 credit**

## Biomedical Science Option: 15 credits

* B[SC 1093C - Anatomy and Physiology I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6100) **4 credits**
* [BSC 1094C - Anatomy and Physiology II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6101) **4 credits**
* [MCB 2010C - Microbiology](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6339) **4 credits**
* [HUN 1201 - Human Nutrition](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6744), **3 credits**

## Environmental Science Option: 17 Credits

* [BSC 1011 - Biological Science II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6094)**, 3 credits**
* [BSC 1011L - Biological Science II Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6096), **1 credit**
* [EVR 1001C - Introduction to Environmental Science](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=7135), **3 credits**
* [OCB 1000C - The Living Ocean](http://catalog.fsw.edu/content.php?filter%5B27%5D=OCB&filter%5B29%5D=&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=8&expand=&navoid=462&search_database=Filter)

OR

[OCE 1001C - Introduction to Oceanography](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6745), **3 credits**

* [BSC 1051C - Environmental Biology: Southwest Florida Ecosystems](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6098)**, 3 credits**
* [OCB 2010 - Marine Biology](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6483), **3 credits**
* [OCB 2010L - Marine Biology Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6678)**, 1 credit**

## Engineering Option: 19 Credits

* [EGS 1001 - Introduction to Engineering](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6354), **3 credits**
* EGN 2312 - Engineering Analysis- Statistics, **3 credits**
* EGN 2322 - Engineering Analysis - Dynamics**, 3 credits**
* [PHY 2048 - General Physics I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6771)**4 credits**
* [PHY 2048L - General Physics I Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6776)**, 1 credit**
* [PHY 2049 - General Physics II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6772)**4 credits**
* [PHY 2049L - General Physics II Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6777)**, 1 credit**

## Scientific Business Option:

* [ACG 2011 - Financial Accounting II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6048)

**OR**

[ACG 2021 - Financial Accounting](http://catalog.fsw.edu/content.php?filter%5B27%5D=ACG&filter%5B29%5D=&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=8&expand=&navoid=462&search_database=Filter), **3 credits**

* [ACG 2071 - Managerial Accounting](http://catalog.fsw.edu/content.php?filter%5B27%5D=ACG&filter%5B29%5D=&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=8&expand=&navoid=462&search_database=Filter), **3 credits**
* [ECO 2023 - Principles of Microeconomics](http://catalog.fsw.edu/content.php?filter%5B27%5D=ECO&filter%5B29%5D=&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=8&expand=&navoid=462&search_database=Filter), **3 credits**
* [MAN 2021 - Management Principles](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6314), **3 credits**
* [MAR 2011 - Marketing](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6330), **3 credits**

## Technical Electives: 12 – 16 Credits

Courses from any of the Options above as well as:

* [ACG 1001 - Financial Accounting I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6047), **3 credits**
* [AST 2002C - Astronomy](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=7083)  **4 credits**
* [BSC 1005C - General Biology](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=7133)  **4 credits**
* [BSC 1050C - Environmental Biology: Our Global Environment](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6097), **3 credits**
* [CHM 1020C - Chemistry for a Sustainable Future](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=7134)  **4 credits**
* [CHM 2025 - Introduction to College Chemistry](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6115), **3 credits**
* [CHM 2025L - Introduction to College Chemistry Laboratory](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6121) **, 1 credit**
* ESC 1000C - Introduction to Earth Science, **1 credit (NEW)**
* [ECO 2013 - Principles of Macroeconomics](http://catalog.fsw.edu/content.php?filter%5B27%5D=ECO&filter%5B29%5D=&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=8&expand=&navoid=462&search_database=Filter), **3 credits**
* [GIS 1040 - Geographic Information Systems (GIS)](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6243) , **3 credits**
* [GIS 1045 - Geographic Information Systems (GIS) Customization](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6244), **3 credits**
* [GLY 1010C - Physical Geology](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6245)  **4 credits**
* [GLY 1100C - Historical Geology](http://catalog.fsw.edu/content.php?filter%5B27%5D=GLY&filter%5B29%5D=&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=8&expand=&navoid=462&search_database=Filter)  **4 credits**
* [HSC 1531 - Medical Terminology](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6457), **3 credits**
* [ISC 1001C - Foundations of Interdisciplinary Science I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6304), **3 credits**
* [ISC 1002C - Foundations of Interdisciplinary Science II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6305), **3 credits**
* [MAC 1105 - College Algebra](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6371), **3 credits**
* [MAC 1106 - Combined College Algebra/Pre-Calculus](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6372)**5 credits**
* [MAC 1114 - Trigonometry](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6382), **3 credits**
* [MAC 1140 - Pre-Calculus Algebra](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6384), **3 credits**
* [MAC 1147 - Pre-Calculus Algebra/Trigonometry](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6385)  **5 credits**
* [MAC 2233 - Calculus for Business and Social Sciences I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6528)  **4 credits**
* [MAC 2311 - Calculus with Analytic Geometry I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6539)  **4 credits**
* [MAC 2312 - Calculus with Analytic Geometry II](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6540)  **4 credits**
* [MAC 2313 - Calculus with Analytic Geometry III](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6541)  **4 credits**
* [MAN 2582 - Principles of Project Management](http://catalog.fsw.edu/content.php?filter%5B27%5D=MAN&filter%5B29%5D=&filter%5Bcourse_type%5D=-1&filter%5Bkeyword%5D=&filter%5B32%5D=1&filter%5Bcpage%5D=1&cur_cat_oid=8&expand=&navoid=462&search_database=Filter), **3 credits**
* [MAP 2302 - Differential Equations I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6536)  **4 credits**
* [MAT 1033 - Intermediate Algebra](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6335)  **4 credits**
* [MAT 1100 - Mathematical Literacy for College Students](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6336)  **4 credits**
* [PHY 1020C - Fundamentals of the Physical World](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=7084), **3 credits**
* [SLS 1101 - College Success Skills](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6365), **3 credits**
* [STA 2023 - Statistical Methods I](http://catalog.fsw.edu/preview_course_nopop.php?catoid=8&coid=6826), **3 credits**