

FSWC - Lee is a dynamic learning environment that is dedicated to creating and sustaining the independent learning process. Teachers are not merely in charge of dispensing information and grading papers, but rather they serve to create and monitor a structure where students can develop critical thinking skills to access, apply, and investigate relevant topics. All instructional staff members are continuously participating in team-based planning, teaching, and an evaluation process that includes teachers as learners. Not only do we expect students to take learning and development seriously, but we as a staff do as well. We all believe in the power of deciding to:

Work to Learn; Learn to Lead!!!

The pages that follow contain information included for deliberate reasons. Specific courses that <u>freshmen take</u> are presented as bold and underlined. Specific areas of professional development and deliberate practice for all instructional staff start with and are *italicized* below their names. This information provides a glimpse into how teachers are constantly working to provide innovative and complimentary experiences for themselves and their students. Given that an academic department may only have a couple individuals in a small school like this, it is simple to be deliberate about what we do and why we do it. There is an intentional scaffolding of skills, content, and methodology for each class, and these decisions are carefully orchestrated to help students get the most out of their time here.

Students who successfully complete our course of study gain these critical thinking, communication, and collaborative skills and are routinely excelling in dual enrollment classes as Junior and Senior Students. Additionally, former students, studying at universities and colleges around the country, are enjoying the benefit of being well-prepared independent learners. At FSWC - Lee, you can be assured that there is no lack of Work, Learning, or Leading; and our motto is an active and heartfelt commitment to improving the lives of each and every Buccaneer!!!

Science Skills and Progression

The overall approach in science at FSWC-Lee begins small scale-with the in-depth study of matter and its interactions. Students gain a valuable foundation in atomic theory and chemical behavior, which is later applied as they move on to the larger scale concepts of molecular biology. Both courses rely heavily on labs and hands-on investigations that allow for multiple learning modalities and opportunities for mastery of content. Real-world application of scientific thinking plays an important role in the development of communication, critical thinking, and collaborative skills.

Ms. Clinton - in Freshmen Chemistry...

...provides an experience rich and laboratory based exploration of chemistry and the foundational role it plays in science. Deliberate effort is made to foster organizational skills, identify topics and content that need specific attention, and to create a systematic and scientific mindset.

Ms. Buck - in Sophomore Biology....

...has structured a mastery-based learning environment that allows students multiple opportunities to demonstrate skills with content standards this is heavily focused on laboratory experiences, critical thinking, and organizational skills.

Math Skills and Progression

In Algebra 1 students are introduced the essential foundations of algebra while implementing a focus on critical thinking skills. Passive learning transitions to active learning as students engage in topics that promote mastery of concepts while preparing them for future mathematics courses at the high school level and beyond. This course also provides students with the essential knowledge necessary to be successful on the EOC graduation exam as well as any other standardized assessments.

In Geometry, students will build on their foundations in Algebra 1 and propel their critical thinking skills beyond their previous skills. Knowledge based in geometry will focus on a more hands on approach and active learning environments that continue to prepare students for college level mathematics courses. Logical argumentation is introduced in this course and pushes students to look at mathematics from all perspectives and beyond a traditional approach to learning. Thinking outside the box is often a mantra of this course.

Students who have successfully completed Algebra I and Geometry Honors should take Algebra II. Algebra II starts with a continuation of concepts studied in Algebra I. Students will be challenged by new concepts that require graphing skill, function analysis, solving higher order equations, investigating complex number systems, and working with matrices, conic sections, logarithms, data analysis, and probability. By the completion of this course, students will master concepts that will prepare them for college mathematics courses and beyond. They will have transitioned to independent learners.

Mr. Schreiber teaches Freshmen Mathematics

...where students are challenged to complete numerous basic math problems on a web based platform called IXL. Last year's effort produced FSWC - Lee as national and world champions and developed a healthy competitive spirit while solidifying necessary math skills.

Mr. Duda - in Sophomore Mathematics...

...there is a deliberate effort to capture the "wordy" side of math. Students must be able to talk and write about mathematics concepts, problem solving techniques and the integration of math across disciplines.

Social Studies Skills and Progression

In the freshman year, Social Studies students are introduced to the basic foundations and skills of reading the text, note-taking from text and lecture, displaying information in an organized format, research and MLA format, and writing in the content area. As the students move on to their sophomore year, those skills and foundations are put to the test. The focus is now on fostering an ability to take information from different forms and media and use that information to respond to different types of assessments. The Critical Thinking component is at the forefront of the Social Studies experience during the sophomore year.

The best analogy for the experience is riding a bicycle. Early on we learn to ride a bike using training wheels. Those training wheels allow for the pedaling and steering to become second nature. Those skills are built for life without having to be concerned with the most difficult part - balance. Once the training wheels come off, we shouldn't need to think about how to pedal or hold the handle bars. It is a tough transition at first, but since those basic foundations are instilled we ride a bike with great success. Then we can ride with no hands, we can ride someone on the handle bars, or even do far more dangerous tricks as our skills grow. The freshman year is with training wheels, the sophomore year the training wheels come off, and the experience after that is with great success.

Ms. Walker - in Freshmen Human Geography

...provides explicit teacher clarity of objectives and expectations. This enhanced structure allows students deeper engagement and simplifies their first interaction with rigorous content presented in a traditional lecture and test format much like what they can expect in college.

Mr. Jamison - in Sophomore Social Studies....

...deliberate effort is focused to help students understand their own achievement levels and the teacher provides targeted assistance in setting specific goals and areas of focus. Ultimately, encouraging students access internal motivation to improve.

English Skills and Progression

English I and II are vertically aligned to prepare students for success in both high school and college. The curriculum supports student development in every content area because it teaches them to be successful writers, communicators, and critical thinkers.

English I:

- Focus: Reading Critically
- Deconstruction of texts to determine meaning
- Analysis of text structures
- Discussion of literary concepts
- Mechanics of grammar and writing
- Introduction to academic and literary writing

English II:

- Focus: Writing Critically
- Construction of texts to convey meaning
- Development of a thesis
- Discussion of evidence
- Application of universal themes
- Advancement of academic and literary writing

Ms. Reilly - in Freshmen English...

....helps students gauge their own chances of success, estimate progress, and understand their own achievement levels. This involves students engaging in selfassessment, evaluating their own writing, reflecting on their learning, and setting goals for the future to include individualized skill sets.

Ms. Williams - in Sophomore English

...deliberately connects selected literature and themes with World History and/or Biology as students work on technical and critical writing skills. The skills presented, refined, and perfected here capitalize on existing critical thinking skills and sharpen the communication skills necessary to excel at the college level.

Elective Class Skills and Progression

A primary goal in our elective offerings is to find creative ways to connect back to our STEM focus. While it sounds counter intuitive, we adopt the real world philosophy that students need to fail fast to in order to promote success in longer term or broader contexts. For example, the simple choice of not giving up allows students to take multiple attempts at difficult tasks where they can add knowledge or skills incrementally. In the end, the little parts add up to deeper and more complete understanding and students build character along the way. This could be a physical challenge in HOPE class, a systems design or group dynamic problem in Engineering, the challenge of not knowing critical vocabulary in Technology, or learning how to conjugate verbs in Spanish class. Our *Work to Learn; Learn to Lead!!!* motto continually helps to enhance the physical and mental wellbeing of each student.

Mr. Frye - in Engineering...

...structures cooperative group based design challenges allows students an authentic environment to participate in both problem based teaching and learning. The integration of basic physics and a focus on the iterative design process build student skills.

Mr. Schreiber in Technology Class... will

...help refine the concept of "what is technology?" and how mastery of various applications can be used to an individual's advantage. Examples include mastery of Microsoft Office products, basic electronics, introduction to programming, introduction to simple CAD and simulation programs, as well as robotics and the emerging concept of the "Internet of Things."

Ms. Hantzeas - in Spanish....

...uses the combination of self-verbalization, self-questioning, peer interaction, and student driven formative evaluation through creating and performing reality based skits. Using spoken Spanish produces a more useful understanding of the foreign language.

Coach Farbotko - in H.O.P.E....

... is coaching students to set reasonable and attainable goals related to nutrition, health, wellness, and personal habits builds confidence, skills, and strategies required to become a self-sufficient learner. The power of setting goals, maintaining focus, and good old fashioned disciplined living as related to exercise and diet provides a very engaging opportunity for students to challenge themselves.