

Guide to Not Totally Wasting High School

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1 Introduction

I'm starting this project as something to hand to my brother Vishal, but I'll try and make it as comprehensive as possible and see if there's a way to pass it down from student to student.

As a middle school student, you may have many questions about what you should be doing to prepare for high school, such as what courses to enroll in, what sports to play in, and what clubs to join. This short guide aims to give context, information, and suggestions.

One of the most important things I would like to emphasize that in this journey of what many see as a means to a top university, you should not only aim to grow your intellectual abilities, but develop yourself as a person. The ages 14-18 are some of the prime ages that determine what kind of person you become, and in the pursuit of so called "success" it is easy to let your personal development come to a halt.

This is not intended to be a one-stop resource, so make sure you are vigilantly looking into the opportunities available to you.

Currently I think I might be the only author of this guide (I'll try to see if I can get others to contribute their insights) so expect a fair degree of bias, especially as a non athletic STEM focused student.

Who is this guide for? This guide is for high aiming students. There is nothing wrong with having a different set of goals, and this guide isn't meant to imply that not focusing on the content means you "wasted" high school.

2 Courses

Lawton Chiles High in combination with Florida Virtual School offers a very wide selection of Advanced Placement courses, with examinations paid for by the state. It is absolutely essential you take advantage of this opportunity and keep a rigorous course schedule. One may be intimidated by all the fancy titles and procedures, but at Chiles, AP courses are actually quite easy, and sometimes even less time-intensive than their honors counterparts.

In addition to a better curriculum and college credit, AP courses count as 5.0 points out of 4.0, so they offer a nice GPA boost, which contributes to your class rank.

It is very important to maintain straight A's, so it's not worth it to overload on courses and get a B. Know your limits and find a balance between rigor and viability. For example, taking three AP courses and getting three A's is better than taking five AP courses with three A's and two B's.

Many people argue you should only take courses you are interested in. This statement is easily refuted if you consider a broader perspective. Almost every course available in high school is considered general knowledge in foreign countries. Even if you want to study economics, it is reasonable to take high level stem courses in high school because they give you exposure to new topics, and are just

This section discusses strategies to designing your course load. At the end you will find a table that covers a breakdown of course and teacher difficulty.

Note: in the tables below, the sections separated from the top six courses are meant to be taken online and will be discussed in the next section.

2.1 In-school and Online

Requirements At the time of writing, Chiles has the following requirements for graduation.

- 24 total credits
- 4 English credits
- 4 Math credits
- 4 Science credits
- 3 Social Study credits
- 1 Government and Economics credit
- 1 Online credit
- 1 Health Education credit

*Though not required by Chiles, most upper level universities require three years of consecutive language.

9th Grade

Freshmen are often discouraged from taking too many AP courses by teachers and guidance counselors. Do not take this advice too seriously, If you did not struggle with a high rigor course load in middle school then you should be fine with the same in high school.

Two to three courses AP provides a good balance of rigor and flexibility within your schedule.

Table 1: Sample Freshmen Schedule (Moderate to easy)

AP World History
AP Environmental Science
Algebra II Honors
English 1 Honors
Chem 1 Honors
Latin 1
Physical Education (HOPE)

Generally, incoming freshmen will enroll in AP World History, AP Environmental Sciences, and an additional science course. This will of course be in addition to the required courses such as English 1, foreign language, algebra II, and an additional elective. The schedule is a lot easier than it may seem, because in the end, as most AP courses are just regular courses with a standardized exam at the end of the year. There is almost no reason to not take as many AP courses as *comfortably* possible at Chiles.

The summer before the year starts you should complete HOPE(Physical Education) online through Florida Virtual School(FLVS). This will take care of your health and wellness requirement and give you and exposure to online courses.

Instead of taking a language in school, some students opt to take the language credit online and take AP Biology in advance. This is doable, but difficult. Unless you are confident you will be able to handle the load, it is not worth the risk. At the time of writing, only four students have done this, and one received a B.

It is not ordinary to take a seventh period course unless you can find a way home besides the bus, so most students will take six courses at Chiles, and one or two online.

10th grade

Sophomore year is of higher intensity. Most students take 5.5 - 6 AP courses this year. Sophomore year should be focused primarily on courses, clubs, and having fun.

Table 2: Sample Sophomore Schedule (Very difficult)

AP Physics I
AP Statistics
AP Chemistry
AP Human Geography
AP Biology
Precalculus BC Honors
AP Microeconomics
English 2 Honors
Latin 2

The core courses here are Physics, Statistics, Chemistry, and Precalculus. It is pertinent you take these in sophomore year so you can take AP Physics: C as a senior, and so you are prepared for the chemistry subject test. Stats is also helpful to learn for MAO and Dual Enrollment.

Depending on your freshmen year schedule, you may have already taken AP Biology, so you can either take it easy, or load up a course to fill in the blank, such as AP Computer Science A. The reason we load up so much in sophomore year is because junior year is filled with many more responsibilities, and it is optimal to get the hardest courses out of the way early.

Because of the number of high level courses, you must put a lot of effort into learning on your own. Simply learning the minimum to get an A at Chiles is not enough to get a five on any exam. Throughout the year make sure you master your content via reading textbooks or watching videos that reinforce concepts. This way you will not be crushed in May.

It is worth noting AP Biology is one of the most time consuming courses at Chiles, and is often taken in junior year. However if you take it early, your junior year will be less stressful.

Eleventh Grade

Junior generally the most difficult year in high school. Since you will have to focus on extracurriculars and standardized testing, it is best to take no more than seven courses. It is doable to do more, but their may be an impact your other goals.

Table 3: Sample Junior Schedule (Moderately Difficult)

AP Physics II
AP Calculus BC
AP United States History
AP Language
AP Psych or CS Principles
AP Latin
AP Art History
AP Computer Science A

The course load this year should be lower in complexity than sophomore year, and so courses should not be your highest priority. Don't waste your time aiming for 100's in every class when a 95 will suffice.

You will notice that we have jumped from Latin 2 to AP Latin. This is possible at Chiles with permission from the teacher. If not possible, take the third year of foreign language online.

Non music students take AP Art History because it is an AP art credit, meaning it will not lower your GPA or class rank. There are several options if you would like to avoid taking Art History. You can opt to take AP music theory if you have decent experience with an instrument or AP art if you are willing to make a portfolio. If you are very interested in another non AP elective however, I recommended you pursue it, as one additional non AP course will not hurt.

I would stray away from taking more than one course online during the school year, as you will need that time else where.

This year tends to become very competitive, but in general it is not reasonable to try and become valedictorian, because there is no guarantee you can achieve it, and the ends don't justify the means. Remember, there are some 20,000+ students with that title, so it is not as meaningful as competitive awards. Just try to remain in the top 2% - top 5% of your class.

Senior year will be discussed in the dual enrollment section.

2.2 Dual Enrollment Courses

As a senior you will find that you have exhausted most of the available course offerings at Chiles. Fortunately, you have the ability to dual enroll at FSU. This means you will attend legitimate college courses at a university.

This is one of the best parts about high school because you have the freedom to choose courses you are genuinely interested in. There are many prerequisites, but you may have to option to waive them if you speak to a professor.

You will enroll in two semester, fall and spring, in which you will take up to 9 credit hours of courses physically at FSU. The administration makes no exceptions to allowing DE students to take online courses.

Taking higher level math courses is highly beneficial if you want to do a STEM related major, from both a knowledge and admissions standpoint.

Semester 1	Semester 2
AP Literature	AP Literature
AP Macroeconomics	AP Microeconomics
AP Physics C: Mech	AP Physics C: E&M
Dual Enroll	Dual Enroll
Dual Enroll	Dual Enroll
Dual Enroll	Dual Enroll

Table 4: Sample Senior Schedule (Easy)

Apparently Leon County requires students to have a total of six physical courses, so unless you find an exception, you will likely be taking three courses at Chiles and three courses at FSU. Try your best to schedule your courses on the same days, that way you won't have to drive to FSU as much. You may think you enjoy driving, but that'll change fast.

First choose at least one of your courses to align with your intended major. For example, if you want to do premed, consider taking brain and behavior. Or if you want to do computer science, take Object Oriented Programming. Next choose a math course. The following courses have been taken with success in the past: Ordinary Differential Equations, Calculus 3, Linear Algebra, and Statistics. For your third course, choose something easy for the first semester, such as unix or SAS. This way you can focus on college applications.

In your second semester, replace the easy courses with something you find interesting. Just have fun.

2.3 Summer Courses

It has recently come to my attention you can dual enroll before senior year. You will have to talk to your guidance counselor for more information, but you can take courses over the Summer at FSU and TCC, and they will count for both college and high school credit. This is a good option if you are staying in town for the summer.

Using this method, you can complete the English requirement early, which frees up even more time in senior year to take more courses or just relax.

If you are able to take the Calculus BC exam before junior year, you can actually start dual enrolling immediately. I don't see too many advantages to doing this, but if you do, the option is there.

This section is still in development, because I don't know much about the topic.

2.4 Conclusion

Take advantage of all the courses offered to you. Remember you are competing with people all over the country, and many highschools take seven or eight courses a year by default. Don't overdo it, because a B is more costly than fewer courses. Everything in this section is a suggestion, and not a set of rules. Do what you think is best, and make sure to ask your upperclassmen for their insights.

3 Clubs

Clubs are an a key part of the high school experience. Clubs offer the opportunity to compete, give back, and meet new people. A good rule of thumb is to join any club that you think is remotely interesting, then drop it later if you don't enjoy it. You can always drop a club but you can't always join one.

Leadership positions are another important aspect of clubs. If you are heavily involved, and legitimately dedicated to a club, it should be easy to receive an officer position. Officer positions hint at leadership in the college application process, so you should get at least one or two office positions in your time at high school. If you have upwards of three officer positions, it is unlikely that you are committed to all of them, and it will come off as resume padding.

Do not underestimate the importance of clubs for both personal development and college applications.

3.1 Competitive Clubs

Competitive clubs involve a certain level of preparation and competition. Most times, this will require traveling to contests across the state. The benefit of these clubs is that you meet competitive students from other schools, further develop your knowledge and ability in academic topics, and receive recognition for said abilities. Awards help distinguish you from other college applicants. The more impressive an award, the higher the distinction. For this reason you should aim to get as many state and national level awards as possible.

There are two default competitive clubs any STEM student should join at Chiles:

- Mu Alpha Theta (MAO) *pronounced Mayo*
- Science Olympiad (SciOly)

These clubs have wide recognition and are somewhat mature at Chiles. Mu Alpha Theta is a club you should be familiar with by now through Mini Mu and such. While the awards from MAO are not that prestigious, the club also organizes AMC and various community events. It is a great way to make friends and ensure you stay ahead in math.

It is important for you to join clubs that are related to your interests, because otherwise they will not really contribute to your application, and you will hate participating in them.

Below you will see a breakdown of the current competitive clubs at Chiles.

Mu Alpha Theta

MAO is the largest and most successful competitive club at Chiles. It is a testing based contest. You compete in your current mathematics division and a selected topic. There is also a team round consisting of four members for each grade. It is also the best way to make connections outside of Tallahassee.

- Club Size: Very Large
- Sponsor: Mr. Friedlander
- Weekly practices
- Multiple state wide contests
- School is ranked top five in the nation
- Many available officer positions
- Organizes Mini Mu Contest
- Annual Cost: \$700 - \$1800

Science Olympiad

SciOly is the second largest STEM club at Chiles. It is an event based contest where members prepare for predetermined events by studying for a written test and constructing a pre-built item. You will usually work in teams of two.

- Club Size: Large
- Sponsor: Mr. Wilkinson
- Self Practice
- One regional and one statewide contest
- School is ranked top ten in the state

- Six available officer positions
- Very student led with minimal sponsor involvement
- Annual Cost: \$60 - \$200

Robotics

Robotics is a brand new club at Chiles that is based on constructing a robot from parts and programming it so that you can complete certain tasks at regional and state contests. The club is very hands on and time intensive.

- Club Size: Small
- Sponsor: Mr. Clark
- Self Practice
- Multiple regionals, one statewide, and one international contest.
- School has qualified for international
- Six available officer positions
- Good balance of student sponsor involvement
- Annual Cost: \$400 - \$1200

3.2 Olympiads

Olympiads are arguably the most recognized contests in the country/world. The main olympiads are:

- USAMO - Math
- USAPhO - Physics
- USNCO - Chemistry
- USABO - Biology
- USACO - Computing

Here is a short break down on each, but you will have to look more into each of these online. Typically, Chiles students are unable to qualify for upper level Olympiads, but if you advance far enough in an Olympiad, it demonstrates hard work and high level understanding. However, this is no easy task.

USAMO

This is the most prestigious Olympiad. The progression goes:

AMC \rightarrow AIME \rightarrow USAMO

Reaching USAMO means you are among the top 400 math students in the nation. It almost guarantees admission into a top school. Qualifying for AIME is a decent accomplishment in itself, and is much more attainable.

- A good resource is the Arts of Problem Solving Series.
- AMC and AIME are organized through MAO.
- Hall of fame: Andrew Yuan

USACO

This Olympiad is unique in that you take it from home on your computer. You will complete three competitive coding questions across the span of four hours to advance through the levels:

Bronze \rightarrow Silver \rightarrow Gold \rightarrow Platinum

Reaching Platinum means you are amongst the top 300 competitive coders in the country. This almost guarantees admission into at least one top CS program. Reaching silver is attainable for anyone who finished APCS A, and it decent at AMC like problems. Gold requires learning algorithms and is difficult to accomplish, but is possible with enough practice.

- A good resource is the USACO training pages.
- USACO is done at home.
- Hall of fame: Andrew Yuan

USABO

If you are good at biology, this may be worth pursuing.

USABO Opens → USABO Semifinals → USABO National Exam

Qualifying for USABO doesn't guarantee anything, may be appealing to a prospective premed student.

- The recommended book to study is the Campbell Biology book - the same one used in our AP Biology class.
- USABO Open is organized through the biology club

USAPhO

The Physics Olympiad is the second most prestigious Olympiad. It is very nice to have on your application if you want to major in engineering.

F=MA → USAPhO → Physics Camp

Qualifying for USAPhO takes a lot of preparation, and is well respected.

- There are various textbooks to study with, research online. It is necessary to have completed AP Physics 1 in order to do well.
- F=MA is organized through the F=MA club

USNCO

The Chemistry Olympiad is along the same level of USABO in terms of recognition. It is also a nice boost for premed applicants.

ACS local exam → USNCO

- Chemteam.info is a great resource to start out with.
- The Chemistry Open test is organized by the Chemistry Club.

3.3 Service Clubs

Service clubs lack a competitive aspect. Their primary focus is charity through fund raising and volunteering. In general these clubs at Chiles are not the best use of time, as you will not legitimately be contributing much to the community, save donating to preexisting drives. If you are lacking in service hours for the Bright Futures Scholarship, these clubs offer a few ways to volunteer.

Do not attempt to pad your resume by joining several of these service clubs. Both you and colleges know they take minimal commitment. Remember, you can list no more than 8-10 activities on your college applications, so don't waste those spaces on things that you aren't heavily involved in.

Here are some examples of service clubs:

- National Honor Society
- Key Club
- Chiles Interact
- National English Honor Society
- Most competitive clubs have a community aspect.

Keep track of your volunteer hours. You will need 100 in order to receive the Bright Futures Scholarship.

3.4 Creating your own club

Creation

If you find that you are unable to compete in a nationally established contest, it may be in your interests to start a club at Chiles. In the past there have been issues with students resume padding by starting clubs they are not genuinely interested in. Keep in mind, starting a club is not going to help your resume unless you can lead your club to at least competing at the state level. Based on past experience this is only possible if you and some friends are very interested in the club.

In order to create a club, you will need to first find a sponsor. This means you will need to find a teacher who is willing to commit time to handle paper work and lend you a room for meetings. Do not limit yourself to teachers that teach subjects related to your club. Any teacher can be a sponsor.

Next you will need to be approved by ICC. In the past this has been very easy. You get students to sign a form saying they would be interested in your club, then make your pitch to ICC and you get approved. As long as you aren't on bad terms with the board members this shouldn't be an issue.

Growth

You will now have to get in touch with your regional coordinator to set you up for competitions and proper affiliation with the club. Contact these people frequently and be persistent if they are difficult to communicate with.

In order to recruit more members, get your existing members to reach out to their friends. Don't limit recruits to your grade; get both underclassmen and upperclassmen to join. Ensure you get a table for clubrush at ICC. Use remind for recruitment and club organization.

Talk to your sponsor about fund raising. A lot of local restaurants have programs that will help you raise money for your club, so organize as many as possible and promote them hard through outlets like morning announcements and member social media.

Compete

In order for a competitive club to do well, you need to ensure all the participants are motivated. An excellent tool for this is peer pressure. If you and your friends are working hard, you can stand a better chance at convincing others to do the same. Remind people how participation in your

club will help them. If you can't think of way it does, then you need to rethink your club.

Hold meetings at least once every two weeks, and keep your members informed on all important dates and pertinent information.

When organizing trips, there are a lot of rules on transportation so you will need to talk to your sponsor about logistics. Unless you can get a bus, you will need to have parent volunteers.

Leading a legitimate club is a lot harder than it seems, which is why most clubs have such short life spans at Chiles.

Below are a few dead clubs that you may consider reviving:

- Technology Student Association
- Coding Club
- Future Business Leaders of America
- Girls who Code
- Health Occupation Students of America

Remember, forming a legitimate club will take more dedication than a lightweight course. Do not start one just for the sake of being president. If you cannot take your club to a state contest, colleges won't care about it.

4 Standardized Testing

Standardized testing is one of the pillars of your college application. The purpose of these tests is to compare you to the rest of the country on a standardized scale. Your goal is to get the maximum possible score on every standardized test you take. At Chiles, the bulk of non AP standardized testing is done during junior year, though some is done earlier. This section will outline the main tests you need to take and a few pointers and resources.

4.1 AP Exams

The purpose of AP exams is to show that you have actually learned to content and for colleges to compare you to other students. You can also receive credit for doing well on an exam, so you can exempt required courses

in college. UF will accept up to 45 credit hours worth of AP credit (about 15 courses), but most top schools will only accept two to three courses. To check this, simply look up a schools "AP equivalencies". If you are aiming for top schools, think of AP exams as a way of displaying your effort in high school, rather than a way to exempt credit.

You will have AP exams in May of every school year. These exams will usually cover much more than the content covered in class, as Chiles courses are not overly rigorous. For this reason, you will need to prepare for these exams outside of the classroom. For most exams, the best resource available to you are AP Review books, from vendors like *The Princeton Review* or *Barron's Review*. At the end of this section you will see a chart with suggested review books for each exam, but a general rule of thumb goes Princeton for sciences and Barron's for everything else.

Each exam is around three hours long, consisting of a multiple choice and free response section. The difficulty of varies widely from exam to exam, but you will see a difficulty rating at the end of this section. In general humanity exams are the easiest, and sciences are the most difficult.

It is possible to get all 5's but will take effort. For most exams, doing one review book is enough to get a five regardless of content learned during the course. If you don't care too much for your GPA, or you want to get more college credit, consider self studying for an AP exam. This way you can take an exam without having to take a course. To do this, contact the Chiles exam coordinator.

4.2 SAT

The SAT is administered by the college board. The maximum score is a 1600. The test is divided into two parts, each worth 800 points: a math section and an English section. Your SAT score is one of the largest determinants of your college application process.

You can retake the SAT to get a higher score. Most universities allow you to "self report" your scores, meaning that they will not see how many attempts you have made. Many students take advantage of this policy by "super scoring". This is the process of taking your highest section scores from different testing occasions and combining them to form a higher total score. If you plan on doing this make sure your target schools don't require official score reports, for example, Carnegie Mellon requires every test report from all the times you've taken the exam.

If you get a 1530 or below, and you feel like you can improve your score, go for it. Otherwise improving anything above a 1540 has diminishing returns compared to focusing on other extra-curriculars.

4.3 ACT

4.4 Subject Tests

4.5 Certifications

5 College Application Advice

5.1 Letters of Recommendation

5.2 Scholarships

5.3 Essays

5.4 Decisions and such

6 Extracurricular Activities

6.1 Research

6.1.1 Camps

6.1.2 Science Fair/Independent Research

6.1.3 Getting Published?

6.2 Music

6.3 Athletics

6.4 Various Awards

7 Do's and Dont's

8 Appendix