Course: Principles of Architecture + Construction

        4th period: “A” Day [2:30p - 4:00pm]

Location:  Rm CAD/Lab D314
Teacher:  Mr. Diaz
Office:  D314
Office Hours: “B” Day [ 9:00a - 10:30a]
email:  roberto.diaz@gpisd.org
contact:  via EDMODO

COURSE INFORMATION

Catalogue description:

§130.42. Principles of Architecture and Construction (One-Half to One Credit).

(a) General requirements. This course is recommended for students in Grades 9-12.

(b) Introduction. Principles of Architecture and Construction provides an overview to the various fields of architecture, interior design, construction science, and construction technology. Achieving proficiency in decision making and problem solving is an essential skill for career planning and lifelong learning. Students use self-knowledge, educational, and career information to set and achieve realistic career and educational goals. Job-specific, skilled training can be provided through the use of training modules to identify career goals in trade and industry areas. Safety and career opportunities are included, in addition to work ethics and job-related study in the classroom such as communications; problem solving and critical thinking; Information Technology Applications; systems; safety, health, and environmental; leadership and teamwork; ethics and legal responsibilities; employability and career development; technical skills; introduction to hand tools; introduction to power tools; basic rigging; and reading technical drawings.

COURSE OVERVIEW

The course intent is to introduce the world of architecture, interior design, and engineering for all related pathways within the Dubiski Career High School program. The course will be catered more to architectural terminology, skills, techniques, drawings, and programs but will include the fundamentals of interior design and engineering. Students will learn what each profession is and how they work together in the professional building and design arenas. Basic drawing skills will be introduced to set the foundation of design while other projects will set the tone of collaboration among all students. Each assignment will include varieties of all three disciplines whether in relation to a demo, sketch, research, and/or exam.
The first stage of this course is an introduction to architecture, interior design, and engineering professions so students have a better understanding of what each entails. Architectural terminology will be integrated during lesson plans so students can effectively understand key components of design. During this exploration, students will also be exposed to fundamental drawing/sketching techniques that are critical in the architecture/design process. This stage offers a visual cognitive development for students to critically understand spatial dimensions.

In the second stage, an introduction to 1-point, 2-point, and 3-point perspective drawings are examined. Students will have the opportunity to understand how to develop their drawing skills from a visual relation in respect to their point-of-vantage. During this stage, a brief introduction of architectural styles will be integrated with the students’ studies.

The third stage will be a “build on” from the previous in respect to drawing/sketching methodologies. Students will be able to interpret their drawing skills into a 3D build/plan that will take them through a design development process. This stage will focus on what is a plan, elevation, and how to read a blue print from basic icon descriptions to complex geometric formations. This process is critical because students begin to understand the meaning of architecture and spatial relationships when they begin to think of design.

The fourth stage is the technical stage where AutoCAD Architecture will be introduced using basic common key commands to develop previous projects into the digital. A final project will be introduced using a spatial device explored during the third stage and using CAD to develop 2D line drawings.

By the end of all four stages, students will be able to analyze and develop architectural drawings, spatial relationships, comprehend architectural styles and building types, construction systems, and drawing skills that will carry with them into the next course. AutoCAD Architecture will not be introduced to students until they have a solid foundation of drawing methods that develop the visual cognitive skills.

**keywords:** what is architecture, engineering, interior design, free-hand sketch, 2-point and 3-point perspective, plans, elevations, sections, line-weights, blue print, materials, architecture typologies, style, language, history, spatial relations, geometry and mathematical proportions, Adobe Photoshop, Illustrator, AutoCAD Architecture.

*Stages are not guarantee to follow in projected order. Each stage is a predicted state in which students will follow. However, a stage may out of sequence either due to project and/or class development or availability of software.*

**CLASS PROCEDURES**

**START AND DURING CLASS:**
1. When class starts, there will be absolutely NO TALKING.
2. No food, drinks, or snacks. Only water with a cap on the bottle.
3. No one is allowed to move across the room for any reason during a lecture.
4. Everyone must be seated in their own seat with one computer.
5. You are not allowed to BUDDY UP with anyone unless you are in a group project.
6. Ask for permission to use the restroom (a pass will be given to you)
7. Raise your hand before talking (unless otherwise told so).

**AT END OF CLASS:**
9. Clean the lab (meaning leaving all chairs pulled in and keyboards with mouse).
10. Respect the property in the classroom
11. Stay at your seat until it is time to leave (2 minutes prior to time).

Grading Regulations:

1. Student academic achievement shall be based on degree of mastery of the Texas Essential Knowledge and Skills for the grade level subject or course.

2. Grades cannot be adjusted positively or negatively for behavior. (Cheating or failure to follow late work guidelines are allowable exceptions.) The Student Code of Conduct Book should be used in dealing with behavioral problems. Extra credit cannot be awarded for assertive discipline rewards, school spirit/fund raising participation or good attendance.

3. For extra credit to be acceptable, it must contain some content related choices, extra reading, or attempting a more challenging problem or project. Students should not be allowed to do lots of easy things to make up points. No extra credit assignments are allowed to be turned in after the end of school day on the last day of the nine weeks in order to improve a grade.

4. Assignments made in a particular nine weeks period must be averaged in the grading period.

5. No grade over 100 may be recorded on the report card or on the academic achievement record.

6. “Borrowing points” from a previous or future nine weeks is absolutely forbidden.

7. Nine weeks grades become final at the end of the student school day on the last day of the nine weeks. Unless an absence has been documented during the week prior to the end of the nine weeks, neither work nor extra credit may be accepted after the end of the student school day on the last day of the nine weeks.

8. If a student is present the day an assignment is made, the student is still responsible for the assignment/test on the due date though absences have occurred in the interim. Exception: If a student is present the day the assignment is made and absent the day the assignment is due/or the test is given, the student is responsible for the assignment/test the day he/she returns to school. Extenuating circumstances may be considered in consultation with the principal/dean.

9. When absent, a student has one school day makeup time for each day absent; however, a teacher is not required to accept it later than the end of the student school day. The teacher may impose a late work penalty.

Progress Reports:

The four-week progress report shall be released online in GPISD’s Family. Any grade below 70 is failing.
GRADE CALCULATIONS

Nine Weeks

• Daily Work

High School: 40% of the Final Nine-Weeks Grade
Minimum of Nine (9) Distinct Assignments
(1 grade per week minimum)

• Major Work

High School: 60% of the Final Nine Weeks Grade (Defined as requiring several days (3 or more) of independent work preceding the major assignment on the part of the student; however, teacher monitoring is still a critical component). Minimum of four (4) Distinct Assignments. (1 major grade per 3 week evaluation period)

Semester Grade

<table>
<thead>
<tr>
<th></th>
<th>High School</th>
<th>Middle School</th>
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</thead>
<tbody>
<tr>
<td>Average of each 9 weeks grading period</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Semester Test (Project presentation)</td>
<td>20%</td>
<td>10%</td>
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Grade Breakdown:

Daily assignment: TOTAL = 40%
- Assigned work: 30%
- Quizzes: Same weight as ONE TOTAL DAILY ASSIGNMENT.
- Participation: 10%

Major Work: TOTAL = 60%
- Could be one or the other.
  1. Exam
  2. Projects

Late Work:

These guidelines do not affect work turned in late because of an absence. Teachers may allow added days without grade penalty to either of the following conditions for extenuating circumstances.
Daily

Two daily late work papers per nine weeks submitted within three (3) school days, including original due date, will be accepted. There will be a 10 point per day penalty for late work. Late papers may be accepted beyond the third day as determined by campus procedures. This provision does not extend beyond the end of the school day on the last day of the nine weeks. If a teacher has at least eleven (11) or more daily assignments, the teacher may drop two (2) or more grades in lieu of accepting late work as long as the minimum of nine (9) daily grades is maintained.

Major

Ten (10) points for each school day late will be subtracted from the grade earned including the day due. This provision does not extend beyond the end of the school day on the last day of the nine weeks.

Tests are considered major grades; however, tests are not eligible for consideration under the major grade late work policy.

Reassessment:

A student who earns below 70 on a test, with the exception of nine weeks or semester exams, shall be given an opportunity to be assessed after participating in a re-teaching process within a reasonable designated time period. Student in all classes shall be afforded the option to reassess. The only exception to this will be high school student enrolled in college level AP designated classes. The following reassessment rules must be followed:

1. High school students enrolled in college level AP designated classes (not Pre-AP) shall not be provided an opportunity for re-assessment in accordance with general college assessment practices.

2. A student who walks into a class and refuses to attempt the assessment is not eligible for reassessment. Reassessment is meant for students who academically do not understand the material.

3. A teacher determines the type of re-teaching and re-assessment available to the student. The teacher may work individually with the student during guided or independent practice. The teacher may assign a peer to tutor or to work with the student. The teacher may ask the student to come after school for tutorials. The teacher decides the type and amount of re-teaching.

4. No grade higher than 70 will be recorded in the grade book for reassessment. If a student made a 50 on the first assessment and a 95 on the reassessment, then a 70 would be recorded in the grade book.

ATTENDENCE

A court of law may also impose penalties against both the student and his or her parents if a
school-aged student is deliberately not attending school. A complaint against the parent may be filed in court if the student:

1. Is absent from school on ten or more days or parts of days within a six-month period in the same school year, or
2. Is absent on three or more days or parts of days within a four-week period

When a student's absence for personal illness exceeds five consecutive days, the student shall be required to present a statement from a physician or health clinic verifying the illness or other condition that requires the student's extended absence from school.

If a student needs to leave school, or arrives late, he/she must check in or check out through the attendance office. An unauthorized absence (or absences) without parent knowledge will be considered truancy. Truancy may require a parent-student conference with an administrator.

Unexcused Absences:

1. Being out of town, only for acceptable reasons, without principal’s prior approval,
2. Being absent for personal reasons other than illness, only for acceptable reasons, without the principal’s prior approval,
3. Oversleeping,
4. Being truant,
5. Parent failing to contact the school by note or telephone within four school days of an excusable absence, or
6. Any reason for which extenuating circumstances are not found by the campus administration.

Students must be in attendance for 90% of the number of days scheduled in a semester in order to receive credit for each class. When a student’s attendance drops below 90 percent but remains at 75 percent of the days the class is offered, the student may earn credit for the class by completing a plan approved by the principal.

Tardies

Students are expected to be in their assigned classrooms when the tardy bell rings; teachers may require students to be in their seats when the tardy bell rings. If a student fails to meet these expectations in any class, he/she may be required to check in through the assistant principal’s office. Being tardy to school or between classes will be considered an absence for purposes of the compulsory attendance law.

Permission To Leave School

Students who need to leave school before 3:55 must sign out in the attendance office. Failure to do so will constitute grounds for counting the student truant.

REQUIREMENTS:
Assignments: Each assignment will have specific requirements and deadlines. All Assignments must be completed in a timely manner. There will be no extensions to due dates unless noted by the teacher.

Production: Physical printed/booklet and a digital database of ordered files. Each assignment/project will require certain conditions for each assignment/project in which the student will follow unless otherwise determined by the teacher.

Final: All assignments will be documented in high quality digital forms and printout in portfolio format for the end of the year. This will be weighted with the rest of the 2 semester’s work towards the final grade. Failure to comply will result in loss of credit for that project/exam. It is critical that each student complete the final documentation.

Supplies:

Although most supplies will be provided, it is highly recommended that each student observe certain tools and supplies for the success of the individual. Each student is provided a laptop and shall respect the use of the laptop under the Laptop policy. Each student will also be required to have writing utensils (pen and pencil) and paper (notebook spiral, sketch, and graph) for notes, documentation, and sketches. However, you may use your laptops to take notes (this is highly encouraged on OneNote). Each student will be required to turn in a sketch book (or a series of sketches) at the end of each 9-week period. A designated time and date will be established, per term.

If a student cannot afford certain materials, then it is required that the student contact the teacher immediately prior to giving the assignment. This means, you (the student) are not allowed to notify the teacher of the lack of acquiring materials on the day the assignment is assigned. You need to notify the teacher within 2 weeks at the start of the academic school year.

[1] notebook (spiral)
[1] sketch book (5x7 minimum)
[1] graph paper
[2] water-based or gel ink pen (black) (no Bic Pens)
[2] mechanical pencils (0.5mm lead)
[1] 24 count colored-pencils

Software:

Students will be learning several different media outlets to produce high quality work for docu-
mentation, presentations, and 3D modeling purposes. Such software will include AutoCAD Architecture 2012, Adobe Photoshop, Illustrator, InDesign, and Rhino3D, Max, and/or Maya. Throughout the course, a “workshop” will be conducted to teach students how to use the software.

READINGS

Books, articles, texts required will be indicated by the teacher in the course of the semester/year with the assignments.

ROOM REQUIREMENTS:

Students need to comply with Dubiski High School building policy/handbook.

Students will respect the use of the CAD Lab and the facilities as they are the property of Dubiski High School and Grand Prairie ISD. No student will be allowed to download any programs/games onto the desktops at anytime. Abusing the computer for personal gain or interest other than academic related assignments and projects is strictly prohibited.

CIVILITY IN THE CLASSROOM:

Students are expected to assist in maintaining a classroom environment (during and/or after hours) that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, unless otherwise approved by the teacher; students are prohibited in engaging in any other form of distraction.

The student is required to address the teacher and their superiors as a respected adult according to the following. When teacher is present and the student (you) require their attention/help, then the teacher shall be addressed as:

Your teacher name is Mr. Diaz.

The student will not address the teacher in any other way or format unless otherwise indicated by the individual. Using the terms, “Hey, Mr.,” “Mr.,” are strictly prohibited. The student is required to address their teacher by their initial greeting and their last name only.

Inappropriate behavior in the classroom shall result, minimally, disciplinary action.

Restroom breaks:

Prior to using the facilities, students are required to ask approval before leaving the classroom. A pass will be made for restroom and fountain drink breaks. Civility and integrity shall be observed and implement so as to not abuse such privileges. Only one person may leave the room at a time at any moment unless granted by the teacher.

ADA, EQUAL OPPORTUNITY AND ACCESS TO FACILITIES:
The school is committed to the principle that in no aspect of its programs shall there be differences in the treatment of persons because of race, creed, national origin, age, sex, or disability, and that equal opportunity and access to facilities shall be available to all. If you require special accommodations in order to participate, please contact the teacher.

**GRADING:**

“A” indicates that the level of expertise is superior (excellent work) [90-100].

“B” indicates the project task or problem is clearly resolved but lacks in-depth study or resolution in one or two areas (good work) [80-89].

“C” indicates the level of work is satisfactory (average work) [70-79].

“D” indicates the level of expertise is minimal and weak. [60-69].

“F” indicates that lack of work, effort, and/or knowledge of the assignment. [0-59].

**FINAL SUBMISSION**

All of your final board files and portfolio book should be turned in either on DVD or on a EXTERNAL HAR DIVE for submission. It will be properly labeled. All work performed in this class will be formatted according to the following standards. This means, any final works produced will have a filing system/order as such.

Failure to respond to these guidelines will result in a 5 point penalty per assignment within the limitation of the Dubiski Grading Policy.

**EXAMPLE:**

01.01_RDiaz_ProjectName.exe
01.02_RDiaz_ProjectName.exe
02.01_RDiaz_ProjectName.exe
03.01_RDiaz_ProjectName.exe

and so on....
SOCIAL CONTRACT

A social contract has been composed based on the acknowledgment of the student and teacher in the designated course. Each student is required to follow the social contract in accordance with the respected agreement, thereof. No student is exempted from the following and shall be upheld in everyday practice during and after school.

For this class, the following requirements will be strictly enforced at all times. Read and initial the following:

I will come into class, go to my seat, and be ready to learn.

I will be ON TIME to class each and everyday.

I will come properly dress in a professional style (guys: slack and button up shit [no polos], girls in professional attire only...no jeans, no short skirts)

I will recite the CLASS CREED each and EVERYDAY. If a peer is at fault, I will help them at all costs.

I will always have my school issued LAPTOP everyday in this course.

I will always have a pencil, paper, and a ruler each day I am in this course.

I will always have a sketchbook with me while in this course.

I will not, under any circumstances, unless I notify the teacher, bring any snacks or drinks to class.

I will respect my peers at all times while in this class.

I will not make fun of anyone in this class at anytime.

My teacher will respect me at all times and I will respect him at all times.

I will ALWAYS respect my teacher by calling him MR. DIAZ and never use the words “MISTER” or anything else other than Mr. Diaz.

I will always do my homework when it is assigned and I will not use an excuse if I do not turn it in on time, unless indicated by the Student Handbook.

I will have my homework and projects ready at the beginning of class. It is my responsibility to have it done by the deadline date. I will get it turned in without excuses, finished or not. (unless an event alters this ability that must accompany by a letter for approval).
I understand that there will be times that I am required to read text, conduct a “book” report, and take a quiz. I will do everything to ensure I am fully prepared for the quiz.

I understand that I will be required to give multiple presentations and I will not contest to this at all. I know this will account for at least 20% of my project grade.

During all presentations given, I will listen, ask questions, and never EVER disrupt the class during the act of a presentation.

I understand that this class will be treated as a college course and I will be responsible for all course work.

This course will require me to build a model for a major design project. I will build this model or risk failure for that project.

I will be treated as an adult and not a child. But I have to earn that respect and keep it at all times.

I will never use the computers unless I am told to do so.

I will never play any games or mis-use the Internet on the school computers, at anytime. I will only do approved architectural exercises and projects as assigned. Failure to comply will result in punishment directed to the Dean, without contest.

I will not blame others for my faults in this class.

I will always be respectful to others at all times.

I will strive to be the best in architecture and all of my courses.

I do realize that if I do not do the work, I will risk failure and expulsion from this course and all related architectural courses.

I know that attending Dubiski Career High School is a privilege and I will never take it or its teachers for granted.

I will always strive for honor, respect, and high grades each and every day that I am at Dubiski Career High School

I will get this signed by my parent, acknowledging that they understand what I am required to do while in this course.
ACKNOWLEDGE and AGREEMENT:

Based on the following Social Contract and Syllabus, I, _____________________________, agree to comply with this contract. I acknowledge that I have read this contract thoroughly and will follow these rules and guidelines, outlined by the teacher. I will also have this contract signed by my guardian, acknowledging that they know what I is expected of me while in this course, program, and pathway.

I must turn in all assignments/projects/quizzes, issued by the teacher, without contest, in order to receive the appropriate credit. I acknowledge that I understand the penalties set forth by the class, school, and the district for all assignments, projects, and quizzes. Exams will be given on the day of, as instructed by the teacher, and will not be turned in at a later time or date except for the time given.

Signature:

________________________________________________________________________
printed (first and last name)

________________________________________________________________________
signature (first and last name) date

________________________________________________________________________
parent signature (first and last name) date

________________________________________________________________________
parent e-mail address

________________________________________________________________________
phone #

________________________________________________________________________
address