

DIGITAL VIDEO GAME DEVELOPMENT

Syllabus

Bob Jones High School
650 Hughes Road
Madison, AL 35758

Teacher: Bill McIlwain
Email: wemcilwain@madisoncity.k12.al.us
Phone: 256-772-2547

I. **Course Description:**

Digital Video Game Development is a course that provides students with experiences and instruction in applying the fundamental skills and techniques in game development. Designed to introduce students to the elements and structure of game programming and design. The areas of major emphasis in the course are game methodology, programming, game genres, game theory, 2D interactive experiences and immersive environments. Students will identify the professional process of game design; articulate the role of a game designer, apply the elements of game design when modifying an existing game, and develop and refine a game prototype using an iterative process. Students will apply both creative and technical skills into design and refine in addition to implementing the adventure. The appropriate use of technology is an integral part of this course.

II. **Course Objectives:**

Students will be able to describe, analyze, and/or critique games with a consistent vocabulary; design, develop and playtest games; understand the formal systems of games; communicate game designs through pitch, prototype, demonstrations and presentations.

III. **Classroom Expectations:**

Classroom Rules

Students will:

- Be respectful of the teacher, each other, and all classroom property.
- Participate in classroom discussion and group work.
- Use appropriate language at all times.
- Not bring food, drink, or gum into the classroom.
- Bring all materials to class.
- Be in class on time, seated, and dressed appropriately.
- Keep your chair at your computer unless you have permission to move.
- Pay attention during lectures and class discussions with monitors OFF.
- Do not get on the Internet until your work is complete.
- If you break a rule or conduct yourself in a manner that disrupts instruction or is disrespectful, you will be disciplined according to the severity of the crime. Action taken will include but not be limited to verbal warning, parent phone call, parent conference, and/or discipline referral.

*Other rules may be added if deemed appropriate.

Classroom Consequences

If classroom rules are violated, the following consequences will be administered:

1. Warning.

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2. Detention.
3. Detention and parental contact.
4. If you continuously choose to not follow classroom rules, then an administrator will be contacted as well as a parent conference.

Student accommodations:

Requests for accommodations for this course or any school event are welcomed from students and parents.

Student Laptop utilization:

- Student laptops should not be hard wired to the network or have print capabilities.
- Use of discs, flash drives, jump drives, or other USB devices will not be allowed on Madison City laptops.
- Neither the teacher, nor the school is responsible for broken, stolen, or lost laptops.
- Laptops and other electronic devices will be used at the individual discretion of the teacher.

3. Neither the teacher, nor the school is responsible for broken, stolen, or lost laptops.
4. Laptops and other electronic devices will be used at the individual discretion of the teacher.

IV. Grading Policy:

Test grades will account for 70% of the 18-weeks grade, with the remaining 30% being determined by quiz/daily grades. The grading scale is as follows: A (90-100), B (80-89), C (70-79), D (65-69), and F (below 65). Grades will be a reflection of mastery of the standards. Make sure all absences are excused as class work can be made up and graded for excused absences only. The Final Exam counts for 1/5 of final grade.

V. Make-up Test Policy:

If you are absent, it is your responsibility to discuss the missed assignments and/or lecture with the teacher. All work missed on the day(s) of the excused absence(s) must be made up within three school days after returning to school. **It is also your responsibility to turn this work in to me by the third day.** If you do not turn in the work within **3 days** then it will become a zero. If you missed a test or quiz, we will need to schedule a day at either 7:30am or 3:30pm for you to take the make-up test. If you need additional laptop time to complete assignments or tutoring, please see me to arrange a time.

VI. Text and Other Required Reading:

TBD
Software necessary - Gaming Engine and Team Management
Software (examples Unity and SourceTree)

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VII. Materials and Supplies Needed:
3-Ring Binder
1 Composition Notebook (Game Journal)
Loose Leaf Notebook Paper (College Rule)
Graph Paper

VIII Homework: Homework/Reading Materials will be assigned on a daily basis. Homework/Reading Materials will be completed using cloud based programs

IX. Quizzes: Quizzes are announced and count as daily grades.

18 – WEEK PLAN*	
Week 1	Unit 1 - Digital Game Industry
Week 2	Unit 1 - Digital Game Industry
Week 3	Unit 2 - Game Genres & Reviews Minecraft Programming through Code.org (Work through each tutorial, Voyage Aquatic, Adventurer, Hero's Journey & finally the Designer section to create their own game)
Week 4	Unit 2 - Blogging & Critiquing Introduce Drag & Drop programming (Code.org, Gamefoot, Codespark or Scratch)
Week 5	Unit 3 - Game Design & Paper Prototyping Introduce Python Programming
Week 6	Unit 3 - Acting like a designer Do more python programming this week with the discussions about game theory
Week 7	Unit 4 - Game theory, Construction Techniques & Strategies Python Programming moving from Jupyter Notebooks to Miniconda3
Week 8	Python Adventure Game (PPT) Test Grade
Week 9	Building a Game using Pygame & Python
Week 10	Python Crash Course Book: Project 1 - Chapter 12
Week 11	Python Crash Course Book: Project 1 - Chapter 13
Week 12	Python Crash Course Book: Project 1 - Chapter 14
Week 13	Unit 7 - Unity - 2D game development

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Week 14	Unit 7 - Unity - 2D game development
Week 15	Unit 7 - Unity - 2D game development
Week 16	Game Creations
Week 17	Final Project Assignment
Week 18	Final Project Assessment & Review for Finals

* The syllabus serves as a guide for both the teacher and student; however, during the term it may become necessary to make additions, deletions, or substitutions. Adequate notice will be provided to students of any necessary changes.

Final Assignment Overview

Preparation Phase

- 2 One Page Game Ideas
- Modify a broken game into a more meaningful gameplay experience
- Experience Game Design
- Narrative Game Design One pager

Final Game Design Project :

- One Sentence Pitch
- Team Formation and Schedule Document
- One Pager
- Game Design Pillars
- 4 Progress Reports(2% each)
- Game Pitch Presentation
- Playable Prototype
- Peer Evaluation

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COMPUTER ASSIGNMENTS

- Each student will be assigned to a computer in the first of week class. You may **NOT** change computers without permission from me and you may **NOT** let another student access your computer. Even if your computer is not working correctly, you must inform me and you will be reassigned until the problem is fixed.
- If any inappropriate activity or vandalism occurs at your assigned computer during that class period, it will be presumed that **YOU** are responsible.
- If, at the beginning of class, you discover a problem with your computer, you must immediately let me know. Otherwise, **YOU** will be held responsible.

RULES FOR USE OF LAB COMPUTERS

- Any computer vandalism (software and/or hardware) will result in a loss of computer privileges for an indefinite period of time and a discipline referral will be issued.
- When you are allowed to access the Internet, any viewing, printing, or downloading “inappropriate” material from the Internet will result in a loss of computer privileges for an indefinite period of time and a discipline referral will be issued. You are allowed to access the Internet **ONLY** after all your work is completed. If this is not the case, you will be given a warning or detention.
- In the past, certain offenses that have been deemed by the administration and/or technical staff as harmful to the system network or as a potential security risk have resulted in removal of the responsible student(s) from the class and from ever accessing a computer at Bob Jones again.
- If you are not sure about what is considered inappropriate, check with me **BEFORE** you act!
- **ALL RULES AND POLICIES STATED IN THE BJHS STUDENT HANDBOOK REGARDING COMPUTER USE WILL BE STRICTLY ENFORCED.**
- The academic misconduct policy of the school will be followed in this course.
- The attendance policy of the school will be followed for this course.
- All requests for accommodations, for this course or any school event, are welcomed from students and parents.
- Any student who receives a failing grade during this course is urged to discuss this with the teacher.

Dear Parent/Guardian,

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I look forward to having a great semester! I want to help make this a successful and enjoyable class. I feel fortunate to have your student in my class this semester and hope that you will contact me should you have any concerns about the progress of your student or any aspect of the instruction. With your student, please read the attached syllabus and policies, then sign and date this signature page and have your student return this form to me in class. Please provide a current email address and phone number at which I can contact you should the need arise. Please feel free to contact me at school with any concerns.

Thank you,

Mr. Bill McIlwain
wemcilwain@madisoncity.k12.al.us

My child and I have read and discussed the classroom syllabus and agree with all policies. Please fill out and return this page only with the correct information to Mr. McIlwain.

Student Name (Print) _____ Date _____

Student Signature _____ Date _____

Parent/Guardian Name (Print) _____ Date _____

Parent/Guardian Signature _____ Date _____

Email address _____ (w) _____ (h)

Phone number _____ (w) _____ (h) _____ (c)

Please provide me with any important information about your child that I will need to know:

Addendum to Class Syllabus

1. Put away and silent cell phones & electronic devices

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*Electronic devices and accessories (CD players, Ipods, handheld games, mini-TVs or personal DVD players, cell phones, ear buds, personal laptops, pagers, ear etc.) should not be on the desks or used unless otherwise directed. It has been proven that trying to utilize these devices (unless otherwise specified by the teacher) while in class can lead to failing the course. You must pay attention at all times to be successful in the class.

2. Do not get up out of your seat unless you are directed to by the teacher.

3. Please be on time! If you are late to class you could get detention.

4. Do your best work & turn it in on time! As I coach my runners..."It's easier to keep up than catch up!"

*Remember that the work that you turn-in is a reflection of your effort on the assignment. Think about the following expectations when you are preparing an assignment that I will review:

*Write your full name, date and school on all assignments. All work must be neatly done and legible in order to receive credit. If you print, capitalize properly (do not write using all capital letters).

*Never turn any assignments in with the "fringes" from spiral notebooks on the paper or I will not accept that assignment. Likewise, assignments that are bunched up, crinkled, illegible, sloppy, or contain stains or holes are unacceptable.

*ALL MAJOR ASSIGNMENTS, RESEARCH PAPERS, ESSAYS & PROJECTS MUST BE TYPED. Final draft format for typewritten work is as follows: 12-point font, double-spaced, 1" margins, and use a "normal font" such as Arial, Comic Sans, Times New Roman, etc. (nothing too difficult to read and a font that prints using capital and lower-case letters).

Student signature _____

Date _____

Parent/Guardian signature _____

Date _____