GAM 3352-01

Game Development

T/Th 1:35 Pm – 3:15 Pm

Fall 2022 Syllabus and Course Calendar

Classroom: NQSC 125C  
Instructor: Brian Heagney  
Office: NQSC 341

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| Professor Heagney’s Office Hours | | | | |
| Monday | Tuesday | Wednesday | Thursday | Friday |
| 1-2 PM  3:30 – 4 PM | 12 – 1:30 PM | 1-2 PM  3:30 – 4 PM | 12 – 1:30 PM |  |

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Email: [bheagney@highpoint.edu](mailto:bheagney@highpoint.edu)  
LinkedIn: www.linkedin.com/in/brianheagney/

Course Description

Overview of the game development process from conception to the publisher. The shift from author to team based development and the roles and responsibilities of team members is stressed. Students will collaborate on the design and preliminary work-up of a game. *Four credits*. Prerequisite: GAM 2252

Flex-Clause

Due to the nature of holding University classes during a national pandemic, I am reserving the right for any part of this course to change based on pressures from anything related to COVID-19. This includes any issues faced by students in this course, but also issues faced by myself, the instructor.

I am making it my mission to deliver the content to you, the student, and if we need to be flexible in the face of a pandemic, we will do what it takes to get through any obstacles thrown in our way.

Course Objectives

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| Student Learning Outcomes: | **By the end of the course, students should be able to:** | **Method for Assessing this Learning Outcome** |
| Become certified in Scrum Foundations, obtaining a professional certificate from CertiProf | Certiprof Exam |
| Be able to present their work professionally, consistent with game industry standards and trends | Game Design Portfolio |
| Be competent in image and audio authoring technology skills relevant to video game and related industries. | 3D Modeling / Materials; UI |
| Be competent in video game development technology skills relevant to video game and related industries. | All major projects |
| Work effectively and efficiently in group game development projects | All major projects |
| Understand and be able to implement versioning software for game development | All major projects |
| Understand and be able to implement agile development methods, particularly SCRUM | All major projects & Certiprof Exam |

Textbooks and Required Course Materials

* **NO TEXTBOOK**—While there will be assigned readings and videos for this course, all materials are available online for no cost. Details for weekly readings will be hosted on blackboard.
* A **USB flash drive 16GB** (or higher).  Every student’s storage space will differ. Some students have used 10 GB, some students have used much more. If you are saving your builds for your game on a weekly basis, you may need a lot of storage space. Bring your data/game/assets to every class to work on and show me.
* **Software/Computer Labs** – There will be some use of digital software for this class, all of which are installed on the computers in NQSC 125 (The Game Lab). It is expected that you will have to organize your time accordingly to use this software, ensuring that you schedule time to work in the Game Lab when there is not another class going on.  
    
  **User Account Requirements:**
* Epic Games user account
* Attlassian: Jira user account
* Github.com user account

Assignments and grading

* **Github, Game Engines, & Greyboxing, Oh My! (10% of grade) –** This assignment is an introduction to grey box prototyping and most importantly introduces the concept of using version control to collaboratively work on a project with a team. Full details will be on Blackboard.
* **Jira Setup (5% of grade) –** This short assignment will focus on using Jira to write user stories, set up sprints, and generally prepare for a semester of managing and tracking a game project. Full details will be on Blackboard.
* **3D Asset (10% of grade)** – This assignment will serve as an introduction to 3D modeling for games, along with some shader development in Unreal Engine. Full details will be on Blackboard.
* **Button & a Door (15% of grade) –** Students will learn how to program interactivity in Unreal Engine using Blueprints. Full details will be on Blackboard.
* **Puzzle Design & Programming (15% of grade) –** Students will advance their understanding of the “Button & Door” concepts to develop a working puzzle for the group project. Full details will be on Blackboard.
* **UI (15% of grade) –** Students will learn Unreal Engine’s UMG Widget system for developing HUD content to enhance their game and overall puzzle design. Students will be introduced to vector and raster image editing systems. Full details will be on Blackboard.
* **Shipped Game (10% of grade) –** Students will collaborate to ensure that their group game is published as a short escape game on Itch.io. Many bugs will need to be squashed and a game page must be collaboratively developed for this to fall into place. Full details will be on Blackboard.
* **Quizzes (10% of grade)** – There will be short online quizzes based on assignment texts and assigned readings and videos. In this course, quizzes must be taken to advance through the class modules. All quizzes will be available on Blackboard.
* **Certiprof Exam (4% of grade)** – The Final Exam Block will consist of a proctored exam on Scrum, administered through Certiprof.
* **Portfolio (6% of grade)** – Students in the Game Design Program at High Point University should be maintaining a Game Design portfolio. Students will be producing work that could potentially be placed in their portfolios this semester. Full details will be on Blackboard.

Expectations for out-of-class work

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| Out-of-Class Work: | In addition to attending class and completing all course requirements, students are expected to spend at least 2 hours each week engaged in out-of class work (i.e., reading, studying, doing homework, working on projects, etc.) for every hour of credit earned in this course. |

According to HPU’s accreditation guidelines, for every 1 hour of credit earned in a course, students are expected to spend at least 2 hours each week engaged in out-of-class work (i.e., reading, studying, doing homework, working on projects, etc.). Therefore, in a 4-credit course, students are expected to commit an average of at least eight hours per week outside of class. (In a 2-credit course that meets for half of the semester, you are still expected to commit to an average of eight hours per week.) The estimates listed below reflect the out-of-class time expectations for a typical student – some students might need more or less time on these assignments.

* Assigned Readings & Videos – approx. 28 hrs out of class
* Github, Game Engines, & Greyboxing, Oh MY! – approx. 12 hrs out of class
* Jira Setup - approx. 6 hrs out of class
* 3D Asset – approx. 12 hrs out of class
* Button & A Door – approx. 12 hrs out of class
* Puzzle Design & Programming – approx. 18 hrs out of class
* UI – approx. 18 hrs out of class
* Shipped Game – approx. 6 hrs out of class
* Portfolio – approx. 8 hrs out of class

Deadlines

See School of Communication policy at end of this document (short version = late work loses one letter grade per day; no late work is accepted after three days).

Grading

Grades are assigned as follows (there is no “rounding” of grades):

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| A (superior) –superior quality (90-100%) | B (excellent) –clearly above average (80-89%) | C (average) satisfactory work (70-79%) | D (inferior) –good enough to credit (60-69%) | F (failure) –work fails to meet the minimum expectations (0-59.9%) |
| A+ (97 - 100) | B+ (87 - 89.9) | C+ (77 - 79.9) | D+ (67 - 69.9) | F (0-59.9%) |
| A (93 - 96.9) | B (83 - 86.9) | C (73 - 76.9) | D (63 - 66.9) |
| A-(90 - 92.9) | B-(80 - 82.9) | C-(70 - 72.9) | D-(60 - 62.9) |

Please note that simply completing all required elements of an assignment does not entitle you to an A. Acceptable work of average quality earns a C. You must go above average expectations to receive an above average grade. This mimics the professional world of communication, where basic proficiency might get you in the door at the entry level, but creative thinking and a willingness to go beyond the minimum expectations are necessary to get noticed and advance.

Blackboard Blackboard Blackboard Blackboard Blackboard

I am a self-avowed blackboard nut and evangelist. I use blackboard for all of my class administration, and therefore you MUST use blackboard as well. If you have never used Blackboard before, it will become your friend. If Blackboard is already your friend, you will become BFFs. If you dislike Blackboard, then please come see me and I will evangelize to you appropriately. The following is how I use Blackboard:

**Blackboard Structure:** This course has a very specific structure on blackboard that is centered around modules that culminate in very specific deliverables (major projects). For each module there will be a series of readings, videos, and quizzes that must be followed in order, as shown in the diagram below:

**MODULE**

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| Read the Module Assignment |

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| Short Quiz on the assignment |

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| View Intro Video |

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| Short Quiz on the Intro |

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| Begin reviewing the module’s assigned readings/videos |

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| Submit main module assignment |

**Assignments:** All assignments will be hosted and explained in Blackboard. Every major assignment will have a rubric attached to it in Blackboard, which will help you understand how assignments will be assessed.

For every assignment, you MUST submit something through Blackboard. If you complete an assignment and do not submit it to Blackboard, it is as if you have not completed it and it will be counted as late.

**Assignment Calendar:** Blackboard has an amazing assignment calendar associated with it. When you go to the Blackboard assignment calendar, you will be able to see EVERY assignment and quiz that is assigned so you won’t ever forget!

**Syllabus:** This syllabus will also be hosted on Blackboard.

**Blackboard is Master:** Blackboard assignment dates and descriptions take precedence over all dates/descriptions on this syllabus.

**Feedback:** Feedback for ALL assignments (including final assignments) will be conducted through blackboard rubrics.

Problems with Blackboard: Please contact IT IMMEDIATELY if you do not have access to our class blackboard page. I cannot help you, only IT can help you. It is your responsibility to remedy the problem ASAP so you can participate in the course.

Digital Portfolio

All students in the school of Communication are required to develop a digital portfolio on their LinkedIn page. The digital portfolio is an online collection of the work you've done during your time at High Point University.

This class requires the creating and maintenance of an online game design portfolio of your own design. The work you do in this class can be placed in your online portfolio.

Writing styles

Professional work should be written in the latest revisions of the Associated Press (AP) Style Manuals for print and broadcast. (Yes, AP also has a style manual for broadcast.) The School requires academic papers to be written in the latest revision of the American Psychological Association (APA) style. If you’re unfamiliar with this style, please see the Chair or the Dean. Other academic styles are not accepted unless the student work is written for a publication or event that requires a different format. Having students learn multiple writing styles only confuses them.

Absences and tardies

Because I care about you, after two unexcused absences you will receive a Starfish Notice. I will continue to make Starfish notices due to absences at my discretion. I care about your education and I want you to learn. Also, if you miss a couple of classes in a row, I might just worry about you.

Tardies are also unhelpful for everyone. Be on time. Students will not be permitted to make up grades for work missed due to an unexcused absence or tardy.

Copyright, Plagiarism, and cheating

Each of you signed the HPU Honor Code and it is your responsibility to abide by it. Cheating or plagiarism can result in failure for the course. Theft of intellectual property (such as images, audio, or video) is equivalent to plagiarism. See the School of Communication policies on plagiarism and copyright at the end of this document.

On occasion, the professor will provide media/materials for use in class.  These materials may include photos, video/audio files, scripts, and design templates.  These items are copyrighted (by the professor and others) and may only be used in classroom exercises as specified by the professor.  Consequently, students may not use media supplied by the professor in their projects unless they have been given permission to do so. Student projects containing unauthorized material provided by the professor may be penalized or disqualified.  Students also may not share, distribute, or post online any media that contains media elements provided by the professor.

In addition, the professor holds the copyright on all course materials including lectures, PowerPoint presentations, handouts, video/audio media, etc.  Consequently, course sessions and materials cannot be recorded, copied, or distributed in any form without the written permission of the professor.

Plagiarism involves copying the work of others and/or representing it as your own without attribution. Students should not use any media created by another student or outside entity (e.g. downloaded online) in their assignments without prior permission from the professor.  In addition, students should not copy edited sequences, documents, sessions, or projects and represent them as their own. Incidents of copyright infringement and plagiarism will be treated as University Honor Code violations.

GRADE APPEAL

If a student has a complaint or concern about a faculty member regarding a grade, they should first try to resolve it with the instructor in question. If the complaint is not resolved through this interaction, the student should then go to the Department Chair. If the instructor of the course also serves as a Chair, then the student should approach the Dean as the first step in the process.

**For this course**, a student should pursue the following process:

1. Talk with the instructor of the course,

2. Talk with Dr. Stefan Hall who serves as the Chair of the Nido R. Qubein School of Communication’s Game Design department.

The decision of the Chair/Dean is final.

GRIEVANCE PROCEDURE

If a student has a complaint or concern about a faculty member regarding any matter other than a grade, they should first try to resolve it with the instructor in question. If the complaint is not resolved through this interaction, the student should then go to:

1.     the Department Chair;

2.     the Dean of the School of Communication; then

3.     the Senior Vice-President of Academic Affairs, which is the final step in the grievance process.

Bypassing any of these steps—going directly to the president, for example—will not resolve the issue and will only delay resolution. Senior administration will not deal with grievance issue unless it has been discussed at the appropriate level.

For this course, a student should pursue the following process:

1. Talk with the instructor of the course.

2. Talk with Dr. Stefan Hall who serves as the Chair of the Department of Game Design.

3. Talk with Dr. McDermott, who serves as the Dean of the Nido R. Qubein School of Communication.

4. Talk with Dr. Bauer, who serves as the Senior Vice President of Academic Affairs of High Point University.

The decision of the Senior Vice President of Academic Affairs is final.

Exam Block

At High Point University, every course is expected to use its designated exam block. While I try to clearly mark the exam block date and time on this syllabus and on Blackboard, please note that if it is incorrect for any reason, it is expected that ALL STUDENTS verify the correct date and time using the Registrar’s website.

In this course, we will use the exam block for a mandatory SCRUM Fundamentals certification exam. The exam is administered by Certiprof and has a 1-hour time limit that cannot be altered. However, all students attending and taking the certification test will receive full credit for this assignment.

STARFISH SYLLABUS STATEMENT

High Point University cares about your success!

This course is part of a HPU initiative that utilizes Starfish Connect, a communication tool for students and faculty. Through Starfish, instructors, coaches, and advisors provide feedback to you about course progress by emailing you about your academic performance. The emails are designed to be helpful by identifying strategies that increase your success in courses. Be sure to open any emails you receive and follow the recommendations.

Your instructor, coach, or advisor may also recommend that you contact a specific campus resource, such as the Learning Lab or Counseling Center. If an instructor makes a referral, you may also be contacted directly by this campus service as a follow-­‐up.

Starfish also allows you to schedule appointments with various offices and individuals across campus and request help on a variety of topics.

Heagney Etiquette

Email

I will return all emails within 24 hours. If you don’t hear back from me, it is because I made a mistake so feel free to follow-up with me if I don’t respond.

I purposefully do not have my work email on my phone so feel free to email any time of day and please do not apologize for sending emails.

When crafting an email to me, don’t feel the need to include flowery or overly sophisticated language. Just tell me what’s going on and how I can help you. Also, please include which class you’re emailing about. I have many of you in multiple classes and I’ll need that context to quickly help.

Clearly state the problem you have and how I can help. Use screenshots (PASTE INTO THE BODY DO NOT “ATTACH”). Too often in the past, students would just email that they were having problems, and I could not help them in my reply.

When crafting your email, if it’s a question for class, please don’t stress too much about typos. I’m here to be your advocate for learning the material and I’d rather you spend your time on the material, and not worrying about my judging typos (that we all make).

If you’re emailing me for a recommendation then of course you’d want to spend time crafting it properly, but for general day-to-day class emails that sort of worry isn’t necessary.

Example email:

Hey Heagney,

I have a question about the 3D Modeling course.

I’m confused about one of the “missions” of the second assignment (Title of assignment) because my project may not be able to use that particular feature. My project is a \_\_\_\_\_\_\_ but the mission to \_\_\_\_\_\_\_\_ seems to not be compatible.

Can you help me figure out a way that I can continue with my project but still get credit for that constraint?

Thanks!

-Student

Texting

I offer my cell number in case there’s an emergency but please don’t abuse it. This is for moments when you might need a quick response from me right away and waiting 24 hours might be moot. For instance, maybe I’m up and able to answer a question about programming a game engine or 3D modeling. I’m always fine with a quick text if I can help.

Always include your name and class because I might have not stored your name in my phone. Even if I’ve texted with you before, I might have been lazy and not stored your name, or I have a good friend with that name and I don’t want to make a mistake by thinking you’re my friend.

My cell: 336-456-2672

Addressing Me

You may address me in any of the following ways, in order of my own preference:

1. Heagney
2. Professor Heagney
3. Mr. Heagney

Tentative schedule

This is a tentative schedule that is subject to change. Details for each week’s assignments will be posted on Blackboard.

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| Week | Day | Date | Topic | Sub Topic | To Do | Estimated Hours |
| 1 | Tuesday | 8/23 | Intro to Game Dev Management | Group / Project Management |  | Readings / Viewings: 2 hours Greyboxing: 6 hours |
| Thursday | 8/25 |  |
| 2 | Tuesday | 8/30 | Greyboxing Intro to Engine |  | Readings / Viewings: 2 hours Greyboxing: 6 hours |
| Thursday | 9/1 | Due at end of week: Github, Game Engines, & Greyboxing, Oh My! |
| 3 | Tuesday | 9/6 | Intro to Scrum Retrospective Sprint Planning Jira |  | Readings / Viewings: 2 hours Jira: 6 hours |
| Thursday | 9/8 | Jira Assignment Due at end of week: Jira Sprint set up for 9/12 - 9/23 |
| 4 | Tuesday | 9/13 | Asset Development I | 3D Modeling, Marketplace, and Bridge |  | Readings / Viewings: 2 hours 3D Modeling: 6 hours |
| Thursday | 9/15 |  |
| 5 | Tuesday | 9/20 | Due End of Week: 3D Asset | Readings / Viewings: 2 hours 3D Modeling: 6 hours |
| Thursday | 9/22 |
| 6 | Tuesday | 9/27 | Programming I | Intro to Button and Doors |  | Readings / Viewings: 2 hours Button & A Door: 6 hours |
| Thursday | 9/29 |  |
| 7 | Tuesday | 10/4 |  | Readings / Viewings: 2 hours Button & A Door: 6 hours |
| Thursday | 10/6 | Due End of Week: Button / Door  Rough Draft of Game Design Portfolio |
| BREAK | Tuesday | 10/11 |  | | | |
| Thursday | 10/13 |
| 8 | Tuesday | 10/18 | Programming II | Blueprint Communication: Making a puzzle from a button opening a door |  | Readings / Viewings: 2 hours Puzzle: 6 hours |
| Thursday | 10/20 |  |
| 9 | Tuesday | 10/25 |  | Readings / Viewings: 2 hours Puzzle: 6 hours |
| Thursday | 10/27 |  |
| 10 | Tuesday | 11/1 |  | Readings / Viewings: 2 hours Puzzle: 6 hours |
| Thursday | 11/3 | Due End of Week: Blueprint Puzzle |
| 11 | Tuesday | 11/8 | Asset Development II | UMG |  | Readings / Viewings: 2 hours UI: 6 hours |
| Thursday | 11/10 |  |
| 12 | Tuesday | 11/15 |  | Readings / Viewings: 2 hours UI: 6 hours |
| Thursday | 11/17 |  |
| 13 | Tuesday | 11/22 |  | Readings / Viewings: 2 hours UI: 6 hours |
| Thursday | 11/24 | Due End of Week: Working HUD for Puzle |
| 14 | Tuesday | 11/29 | Shipping | Itch & Portfolio |  | Readings / Viewings: 1 hours Itch: 3 hours Portfolio: 4 hours |
| Thursday | 12/1 |  |
| 15 | Tuesday | 12/6 |  | Readings / Viewings: 1 hours Itch: 3 hours Portfolio: 4 hours |
| Thursday | 12/8 | Due End of Week: Portfolio Final Game |
| Exam Block | Tuesday, December 13 8 AM - 11 AM | | Scrum Exam |  |  |  |

**School of Communication Policies, Practices and Expectations**

Students are expected to adhere to all standards outlined in the School of Communication’s Policies, Practices, and Expectations (located at  [http://www.highpoint.edu/communication/files/nqsc\_syllabus\_policies.pdf](https://mobile.highpoint.edu/owa/redir.aspx?C=JyyBBLgH4fYmI71qL7W8GyxmheTK83O7pgF3_zLiu7DsPhTIQFTVCA..&URL=http%3a%2f%2fwww.highpoint.edu%2fcommunication%2ffiles%2fnqsc_syllabus_policies.pdf)) unless alternate standards are specifically outlined elsewhere in this syllabus.