# Game Programming 101

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Course Schedule:

1. Intro (Visual Studio / Code.org)  
   Visual Studio / VS Templates/ Phaser / GitHub/ (1st class)
2. Unity + Game Programming at Pitt-Bradford  
   Unity - Apple Tree / Castle Smasher (2nd)  
   Unity - FPS Controller / other examples(3rd)
3. Special Topics + Free Time (Intermix)

Virtual Reality / 360 Video  
Little Bits

# Stuff used in the course and other info

<https://code.org/> - Code.org - Code.org is a non-profit dedicated to expanding access to computer science, funded by Facebook and Google.

<https://codecombat.com/> - CodeCombat.com is an organization that provides online games also

<http://code.org/api/hour/begin/khan> - Khan Academy (<https://www.khanacademy.org/> ) is a non-profit that specializes in online learning in all subjects

<http://littlebits.cc/> - littleBits is a platform of easy-to-use electronic building blocks for creating inventions, a good way to start learning hardware + programming

<http://unity3d.com/> - Unity is one of the most popular multi-platform game editors, allowing development of 2D and 3D games in all major platforms, including PC, Android, IOS, PlayStation, Xbox and more.

<https://code.visualstudio.com/> - Visual Studio Code is a free, simple version of Microsoft’s popular programming IDE.

The popular app stores:

Google Play - <https://play.google.com/apps/publish>

Apple Store - <https://developer.apple.com/>

Programming Resources

<http://stackoverflow.com/>

<https://slashdot.org/>

<http://www.apple.com/swift/playgrounds/>

<https://scratch.mit.edu/>

**PS items from Code.org to start with:**  
Minecraft - Intro  
Frozen - Loops  
Flappy Bird - Events  
Star Wars - JavaScript  
  
  
<https://www.sitepoint.com/build-a-web-game-in-an-hour-with-visual-studio-and-asp-net/>

<http://www.apple.com/swift/playgrounds/>

**Special Topics**

Hardware - <http://littlebits.cc/>

**Phaser Setup**

<http://phaser.io/>

- Add Visual Studio template:  
  
<https://visualstudiogallery.msdn.microsoft.com/e6eeccc4-3963-4e3d-8181-77d94ae67d9a>

- Download Phaser Examples  
  
<https://github.com/photonstorm/phaser-examples>

- Make a new Phaser project  
  
- Use code from examples

**What we use for game programming - Unity**Unity - Standard Assets Project -  
<https://www.assetstore.unity3d.com/en/#!/content/32351>

Prototype 1 - <http://gameprogramming.rssyn.com/wp-content/uploads/2017/06/Prototype-1.zip>

Prototype 2 - <http://gameprogramming.rssyn.com/wp-content/uploads/2017/06/Prototype-2.zip>

**Virtual Reality**

Microsoft Hololens <https://www.microsoft.com/en-us/hololens>   
  
Oculus Rift <https://www.oculus.com/>   
  
HTC Vive <https://www.vive.com/us/>   
  
Android Gear VR <https://product-guides.oculus.com/en-us/documentation/gear-vr/latest/concepts/gsg-b-sw-software-setup/>   
  
Google Cardboard  
  
Google Daydream

<https://developers.google.com/vr/>

<http://gamemechanicexplorer.com/>

<http://www.doolwind.com/blog/phaser-with-visual-studio-2015-and-typescript/>

<http://icecreamyou.github.io/Nemesis/>

<http://threejs.org/>