1. **Course number and name:** CSCI 5439 Game Programming

2. **Credits and contact hours:** 3 credit, 3 contact

3. **Instructor’s or course coordinator’s name:** James Harris, PhD

4. **Text book, title, author and year:** XNA Game Studio Creators Guide, 2nd Ed, Stephan Cawood and Pat McGee
   a. **Other supplemental materials:** None

5. **Specific course information**
   a. **Brief description of the content of the course (Catalog Description)**
      An introduction to game design and development including game physics, using game engines, using AI in games, creating multi-threaded games, and creating networked games
      **Prerequisites:** A minimum grade of “C” in CSCI 5332 and CSCI 5437
   b. **Indicate whether a required, elective, or selected elective course in the program**
      Elective course for BS-CS.

6. **Specific goals for the course**
   a. **Specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic.**
      - Not a required course. It is not used to assess Student Outcomes
   b. **Student Outcomes**
      N/A

7. **Brief list of topics to be covered**
   - Visual Studio 2008 and C#
   - XNA
   - 2-D Graphics
   - Collision Detection
   - 3D Graphics
   - Animation
   - Textures
   - Index Buffers
   - #D Modeling
   - Linear Algebra
   - Wire Frames
   - Light Sources
   - Hidden Shapes
   - Terrain
   - Audio Effects
   - Networking Concepts