1. **Course number and name**: CSCI 5534 Software Testing and Quality Assurance

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

3. **Instructor’s or course coordinator’s name**: Vladan Jovanovic, PhD

   a. **Other supplemental materials**: None

5. **Specific course information**  
   a. **Brief description of the content of the course (Catalog Description)**  
      Essential concepts and technology for software systems quality assurance and testing.  
      Course covers software testing and the quality assurance body of knowledge including  
      theory, models and methods, as well as contemporary standards and tools.  
      **Prerequisites**: A minimum grade of “C” in CSCI 5530  
   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**  
   • QA in the SDLC, V model, IEEE  
   • Test animation Integrated support Units  
   • Developer’s vs Tester’s Perspective  
   • SQA Manager/Expert vs Management perspective  
   • Foundations (Models and Coverage)  
   • Input Partitioning  
   • Graph Coverage  
   • Logic Coverage  
   • Data flow  
   • Methodology, Standards, and Integration Testing  
   • SW Assurance  
   • Security  
   • SQA-SPI Processes