1. **Course number and name**: CSCI 5537 Broadband Networks

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

3. **Instructor’s or course coordinator’s name**: Ardian Greca, PhD

   
a. **Other supplemental materials**: None

5. **Specific course information**
   
a. **Brief description of the content of the course (Catalog Description)**
      Basic concepts of broadband networks including an introduction to broadband networks, principles and systems. Basic concepts and terminology needed for an understanding of broadband networks which support a variety of service requirements. Emphasis is on structures and principles of broadband networks. Major concepts and principles will be examined along with their corresponding mathematical analysis.

   **Prerequisites**: A minimum grade of “C” in CSCI 5332

   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**
   
   - Technology
   - Components
   - Networks
   - WDM Networks and Designs
   - Network Survivability
   - Photonic packet switching
   - Broadband and select networks
   - Multihop networks
   - Wavelength routed optical networks
   - Virtual topology design
   - Control and management
   - Routing and wavelength