1. **COURSE ID:** BLDG 740  
   **TITLE:** Mechanical Code  
   **Semester Units/Hours:** 3.0 units; a minimum of 48.0 lecture hours/semester  
   **Method of Grading:** Letter Grade Only

2. **COURSE DESIGNATION:**  
   Degree Credit  
   Transfer credit: none

3. **COURSE DESCRIPTIONS:**  
   **Catalog Description:**  
   Regulations and inspection methods governing mechanical construction, heating and cooling equipment, combustion air, floor furnaces, wall furnaces, unit heaters, venting, ducts, ventilation systems, and refrigeration systems and equipment.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**  
   Upon successful completion of this course, a student will meet the following outcomes:  
   1. Describe various HVAC equipment and their uses.  
   2. Identify correct installation procedures and labeling.  
   3. Define critical terms used in the Mechanical Code and in the HVAC profession.  
   4. Critically examine safety issues and their compliance to all building and fire codes.  
   5. Evaluate proposed systems thru the plan check process.  
   6. Prepare for certification as a Mechanical Inspector.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**  
   Upon successful completion of this course, a student will be able to:  
   2. Understand the principles of heat transfer and the operation of heating, ventilation, and air conditioning equipment.  
   3. Learn the current mechanical code requirements applicable to heating, cooling, ventilation and special equipment.  
   4. Review the history of mechanical codes, the administrative and inspection requirements, and potential future requirements.  
   5. Study the mechanical code interaction with building, plumbing and electrical code.  
   6. Participate in exercises on the proper sizing of ducts, vents, combustion air and gas piping.

6. **REPRESENTATIVE METHODS OF INSTRUCTION:**  
   Typical methods of instruction may include:  
   A. Lecture  
   B. Discussion  
   C. Guest Speakers  
   D. Other (Specify): materials demonstrations, written examination, reading assignments, handouts from the Uniform Building Code Study Guide.

7. **REPRESENTATIVE ASSIGNMENTS**  
   Representative assignments in this course may include, but are not limited to the following:  
   **Writing Assignments:**  
   Written responses to homework questions.  
   Written reports following correct format.  
   Aptitude to detect visual defects in systems/components.  
   **Reading Assignments:**  
   Reading assignments  
   **Other Outside Assignments:**  
   Research of specific documents. Critique an inspection report.

8. **REPRESENTATIVE METHODS OF EVALUATION**
Representative methods of evaluation may include:
A. Class Participation
B. Quizzes
C. Class attendance, short quizzes, midterm and final examinations.

9. REPRESENTATIVE TEXT(S):
   Other:

   **Origination Date:** October 2010  
   **Curriculum Committee Approval Date:** January 2014  
   **Effective Term:** Fall 2014  
   **Course Originator:** Anne Figone