

## **George Mack, Computer Science – WID Teaching Portfolio**

### **F. Sample Assignments Produced and Carried Out Under the Writing Fellowship**

Course: 420-315-DW, Programming IV – Advanced C# and .NET Programming

#### **F-6. Sample assignment: Exam Essay Question**

Objectives: (a) Give the students additional homework practice in writing about computer science; (b) provide learning activities about the workplace functions of a programmer/analyst, specifically the design functions described by competencies 016T, 0170, 0173, 017C and 017D (or A) and encountered this semester for the first time, as opposed to the programming and debugging functions described by those same objective but learned and perfect over semesters 1 through 4; (c) assess students' understanding of these concepts and their writing in the discipline by having them write a short essay on their final exam.

Competencies developed: 0004, 000L, 016N.

Methodology:

Preparation:

Before the last class, create an exam essay question (see below) that covers material that has already been learned about the design and development tasks of a programmer-analyst.

In-class and Final Exam Activity:

In class, one week before the final exam, provide the students with the text of an essay question that will be found on the final exam.

Have the students discuss possible answers to the question in small groups.

Ask a few groups to present a verbal synopsis of their group answer, and provide feedback and guidance.

Inform students that they will be expected to answer this question from memory during the final exam.

Administer the exam question and mark it. (NB: Rubric to be developed: this time the marking was just pass/fail; the object for the instructor was to evaluate what types of response can be expected from such an activity.) In addition, all student answers were digitized and saved to disk for further analysis at a later date.

Exam Question (worth 15 marks out of 100):

Write 150 to 200 words on the following topic.

Thesis: There is a significant difference between the tasks of (a) programming and (b) system analysis and design. Learning to program is not the same as learning to analyze and design. Different skills are required. In this course we have done both tasks...

Discuss what skills we learned and used for analysis and design (think about our class and lab activities). Discuss what skills a good programmer-analyst should have. Agree or disagree with the thesis, and give reasons.

