Response to CS APR External Team Report

The following list enumerates the recommendations in the APR external team report, and the action that the Computer Science department plans to take in response to the recommendations.

1. Specify the content and outcomes for core courses to decrease the variation resulting when different faculty teach these courses, and review prerequisites.
   
   We will form committees to write specifications of core course content and outcomes. This work will be based on ACM curriculum recommendations, and will include a review and modification (if necessary) of prerequisites for each course.

2. Ensure that students become competent programmers by having them program throughout the curriculum.
   
   The course content and outcomes reviews mentioned above will include consideration of the demands for programming in each course, and make appropriate recommendations.

3. Put in place competency assessments for upper division students.
   
   We will develop competency assessments in parallel with its course reviews, and develop a process for incorporating program assessment mechanisms into the course assignments and assessments in upper-division required courses. The department will work with CARS to ensure that this assessment process is adequate.

4. Defer ABET accreditation and write a document explaining the department’s accreditations status to stakeholders.
   
   We have already drafted a document explaining our accreditation status. We must defer applying for ABET accreditation until we modify our curriculum and graduate students from the revised program, so this is the default position in any case. We will continue to pursue curriculum modifications because we think they are a good idea independent of the question of accreditation.

5. Maintain an emphasis on oral and written communication in the face of the discontinuation of WRTC 210.

   The CS department has put a replacement for WRTC 210 in place as CS 280 for next year, and we have found two adjuncts to teach it. In the long term, we plan to add a new course called (tentatively) Technical Writing for Computer Science as a required course and find a way to staff it permanently. We are also planning on adding a course in social and ethical issues in computing (a line with ACM curriculum recommendations), and this course should also help improve our students’ communication skills. The net result should be a greater emphasis on communication that we now have in our curriculum.

5. Enhance recruiting efforts to increase the number of female and minority students in the program.

   We will continue to formulate and follow diversity plans in a continuous effort to increase the number of female and minority students and faculty in our program. One faculty member (Chris Mayfield) is also pursuing closer relationships with area schools, and perhaps this can help with diversity recruiting.
6. Increase faculty salaries and remove salary inversions.
   This issue is, of course, out of the department’s control, but the department head will continue to raise this issue with the administration.

7. Obtain faculty positions adequate to deal with a larger curriculum and increased enrollment.
   This issue too is out of the department’s control, and as with the salary issue, the department head will continue to request faculty lines to meet with instructional needs.

8. Obtain resources and facilities adequate to deal with a larger curriculum and increased enrollment.
   Once again, the department head will continue to request resources and facilities to meet our instructional needs.

9. Provide Linux support to relieve the CS department of this burden.
   This issue seems to be outside the purview of the review. Nevertheless, we agree with the recommendation.

10. The CS program should develop a strong brand and depict it in brochures and the department’s web site.
    The department will develop a branding strategy, perhaps in consultation with someone from the College of Business, and use it to redesign its brochures. We agree with the characterization of our program as stressing applications, communication skills, and a liberal arts focus, and we will use this as the basis for a brand, perhaps with the addition of some other features, such as strength in computer security. Presently the department has little control over its web site, but if there is more control when the College of Integrated Science and Engineering is formed, the department will redesign its web site to incorporate the brand as well.

    We have not been aware of other departments offering programming courses. We will look into this and speak these other department about whether we can work with them to provide this service to their students.

11. Advising should be improved so that advisors give complete, correct, and adequate information. Career and internships advising should be strengthened.
    We are surprised and puzzled by this recommendation because there is no indication from senior exit surveys or other sources of information of problems with academic advising. Furthermore, we have programs in place for internship advising and placement. We do not currently present programs providing a broad overview of careers in CS, but companies frequently visit campus and make presentations about internships and positions in their organizations. The problem with academic, career, and internship advising, as we see it, is that despite numerous and repeated efforts to contact students and get them to visit their advisors and to attend various informational sessions about jobs and internships, there is a sizable contingent of our students who ignore all of our messages and will not attend any sessions. We are frankly at a loss as to how to help these students. We will, however, consider the possibility of creating a career overview program, perhaps in conjunction with our student chapter of the ACM.
We will also attempt to create some sort of web site where students and alumni can post stories about their internship experiences and their jobs. Such a site could provide ideas and guidance to students seeking internships or permanent employment, and possibly would appeal to students who are otherwise unwilling to cooperate with our attempts to advise them.

12. Create a strategic plan.

We have already formed and charged a strategic planning committee. The committee has begun its work and presented a draft list of initiatives, and the faculty has discussed them. We plan a retreat in May to continue work on this plan.

13. Engage the CS External Advisory Committee in strategic planning.

We will, as suggested, ask the EAC to review the mission and goals formulated at last summer’s retreat. We will also ask them for their suggestions about strategic goals and priorities. As the strategic plan is formulated, we will again ask for review and input.

14. Coordinate strategic planning with the objectives in the JMU planning database.

We have not had a strategic plan in the past, so the objectives in the planning database have not been coherent. We intend to enter objectives into the planning database derived from our strategic plan as soon as the plan is complete. The planning database can then be used to track implementation of the strategic plan, as it is intended to do.

15. The strategic plan should include creation of an assessment process based on the department’s learning objectives and developed in association with the Center for Assessment and Research Studies.

We will consider this task and its priority as we formulate the strategic plan.

16. The strategic plan should include creation of a professional development program based on data from senior exit surveys, Career and Academic Planning, and recruiter feedback to address shortcoming in student career preparation.

We will consider this task and its priority as we formulate the strategic plan.