

## **Departmental Standards and Expectations - Task Force Report**

**Task force members: L. Q. Chen, R. Colby, J. Redwing, and J. Ruzyllo**

The task force is charged by the department head with recommending a set of guidelines for faculty members at various stages in their careers. These guidelines are supposed to reflect the professional standards of the department and give guidance in advising faculty through all stages of promotion and tenure. Professor Dave Green kindly provided a Senate document on the university policy HR23 for tenure and promotion. One paragraph in the document is particularly relevant. **“An important part of the whole tenure and review process for faculty members is that all parties to the process share common expectations and understandings. Since general statements of principles will be broad and inclusive, each academic unit may develop its own specific expectations and standards as the operational basis for tenure and promotion recommendations. Knowledge concerning these expectations and standards should be generally available, especially to newly appointed faculty members.”** Professor Green also provided a list of departmental standards and expectations for promotion to associate professor and to professor that he came up with last semester based on the Senate document on university policy HR23. The task force got together three times during last and this semester to discuss the standards and expectations for the department. The task force felt that the list provided by Professor Green was a very good starting point. Through the meetings and email communications among the task force members, they suggested a list of expectations and standards for the various stages (second year review, fourth year review, tenure and promotion to associate professor, early tenure, and promotion to professor) of a faculty career (see the attachment). Although not specific in numbers, they felt the list should help faculty members, particularly new faculty members, understand the expectations of the department.

# **Departmental Standards and Expectations**

## **Materials Science and Engineering**

### **Second Year Review**

#### **Research**

1. Has started writing papers independently from the candidate's former mentors
2. Has written several research proposals
3. Showed evidence that a research group is being established
4. The candidate and his or her advisees start to present papers at major national conferences relevant to his or her research field

#### **Teaching**

1. Has started teaching courses at both undergraduate and graduate levels
2. Has started to participate in teaching outreach activities (e.g. distance education, e-courses, short courses, international programs, etc.)
3. Has started advising undergraduates in the lab and undergraduate theses
4. Has started advising graduate students
5. SRTEs are at least at or above the historical average for each course
6. Has started to serve on Ph.D. committees
7. Has started developing new courses or new methods of teaching existing courses
8. Actively participating in ABET review process

#### **Service**

1. Has shown willingness to serve the Department in committees including hosting departmental seminar speakers and organizing special seminar series
2. Willingness to assist student organizations if asked
3. Has started reviewing papers for refereed journals and proposals
4. Actively participating in professional societies, such as committee service or organizing/chairing symposia
5. Actively participating in undergraduate and graduate student recruiting

## **Fourth Year Review**

### **Research**

1. Has published a significant number of articles in peer-reviewed research journals in which the candidate played a major role (the candidate, or one of the advisees of the candidate is the first author)
2. Has demonstrated the ability to serve as the PI for research contracts to support his/her research activities
3. Has submitted at least one significant single-investigator proposal to federal funding agencies and ideally it has been funded.
4. Has established a research group with a growing number of graduate students
5. The candidates and his or her advisees have presented significant numbers of papers at national conferences
6. Has been invited to give talks at national conferences
7. Has been invited to give seminars at industrial companies and other universities.
8. Other evidence – honors, awards, highly cited papers, book editing

### **Teaching**

1. Developed a new course or significantly revised an existing course.
2. Has taught a number of courses at both undergraduate and graduate levels with significant numbers of students
3. Showed improvement in SRTes or the SRTes are at least the historical average for the course
4. Has included undergraduates in the research effort
5. Has one or more Ph.D. candidates who have passed the comprehensive exams and are near completion of their degrees
6. Has served on Ph.D. committees in other departments.
7. Has established some teaching outreach activities
8. Actively participating in the ABET review process
9. Other evidence – honors, awards

### **Service**

1. Has shown willingness to serve the department at a significant level
2. Has established an important role in a professional society, such as committee service or organizing symposia
3. Has shown a consistent willingness to review papers and proposals
4. Actively participating in undergraduate and graduate student recruiting

## **Regular Tenure and Promotion to Associate Professor**

### **Research**

1. Has published a significant number of articles in peer-reviewed research journals based on research at Penn State, in which the candidate played a major role (the candidate, or one of his or her advisees is the first author)
2. Has demonstrated the ability to serve as the PI for research contracts to support his or her research activities
3. Has multiple funded research projects from federal funding agencies, with at least one significant single-investigator project.
4. Has established a research group with a significant number of graduate students
5. Has established interdisciplinary and/or collaborative research within and outside Penn State.
6. Has advisees that are presenting papers at national conferences
7. Has been invited to give significant numbers of invited talks at national conferences
8. Has been invited to give significant numbers of seminars at industrial companies and other universities.
9. Other evidence – honors, awards, highly cited papers, book editing

### **Teaching**

1. Developed a new course or significantly revised an existing course.
2. Has taught a number of courses at both undergraduate and graduate levels with significant numbers of students
3. Showed improvement in SRTes or the SRTes are at least the historical average for the course
4. Has included undergraduates in the research effort
5. Has demonstrated the capability of advising Ph.D. candidates through the entire process
6. Has served on Ph.D. committees in other departments.
7. Has established some teaching outreach activities
8. Actively participating in the ABET review process
9. Other evidence – honors, awards

### **Service**

1. Has shown willingness to serve the department at a significant level
2. Has provided some services at the college and/or university level
3. Has established important roles in a professional society, such as committee service or organizing symposia
4. Has shown a consistent willingness to review papers and proposals
5. Actively participating in undergraduate and graduate student recruiting

### **Reference Letters**

Established a national and some international reputation for research in a specific area as evidenced in strong evaluation letters from the leaders in the candidate's field

### **Early Tenure**

1. Has excelled in all three areas as judged by all the criteria for regular tenure: research, teaching, and service.
2. Significantly exceeded the regular tenure criteria in research as evidenced in publications, research funding, numbers of Ph.D students graduated, invited lectures in major conferences, and all are very very strong letters from the leaders in the field

## **Promotion to Professor**

### **Research**

1. Has continued to publish a significant number of articles in peer-reviewed research journals in which the candidate played a major role.
2. Has continued to run a research group with a significant number of graduate students
3. Has been invited to give plenary or keynote presentations at national or international conferences.
4. Significant evidence of research outreach.
5. Continued to be invited to give seminars at industrial companies or other universities.
6. PI for multi-investigator projects
7. Other evidence for leadership in research – honors, major awards, highly cited papers, book editing, monograph, review papers, research center directors, etc.

### **Teaching**

1. Demonstrated commitment to quality and innovation in teaching, e.g. active participation in e-education and served as PI for internally and/or externally funded education projects
2. SRTE should be above the historical average of the course
3. Continued to successfully advise Ph.D candidates, with many graduated and successfully placed in U.S. industry or academia.
4. Continued teaching outreach activities
5. Other evidence – honors, awards, authored textbook, publications in education journals
6. Positive recognition by alumni

### **Service**

1. Has provided significant service to the department, college and university
2. Has provided leadership to the department, college or university
3. Has provided significant service and leadership to a professional society, such as taking up leadership positions in society committees and organizing major conferences
4. Has shown a continued willingness to review papers and proposals. Preferably has an editorial function.

### **Reference Letters**

1. Established an international reputation for being a leader in research in a specific area or in several research areas, and/or an international reputation for teaching/education (e.g. popular textbook(s) and major external educational projects which have international impacts), and/or an international reputation for service (e.g. consistent leadership roles in major national/international professional societies), as evidenced by strong letters from international leaders.