UNIVERSITY POLICY AND PLANNING COUNCIL
2016-17 CHAIR –CYNTHIA FOX

October 19, 2016
MEETING MINUTES

Present: M. Chen, J. Collins, C. Fox, S. Goel, M. Jerison, C. Parker, D. Wharram (GSA), D. Wheeler, J. Van Voorst, M. Leventhal, S. Chittur

Guests: Jonathan Bartow, Vice Dean for Graduate Education

Ann Marie Murray, Associate Provost for Program Development

Veronica Rowe, Administrative Manager, Computer Engineering, College of Engineering and Applied Sciences

Dola Saha, Assistant Professor, Computer Engineering, College of Engineering and Applied Sciences

Randy Moulic, Professor and Associate Dean, Computer Engineering, College of Engineering and Applied Sciences

---

Approval of the Minutes from September 21, 2016

Minutes of the September 21st meeting were unanimously approved with one grammatical error amended.

Provost's Report

Interim Provost Darrell Wheeler joined us in his new capacity as Interim Provost. Interim Provost Wheeler is continuing the Strategic Plan along with Leanne Wirkkula that was initiated by former President Robert Jones. They are in the fourth week of the process and are beginning to take instructions from the group. The question of enrollment numbers was brought up and while the final numbers are not currently available, Interim Provost Wheeler will provide those when available. He also noted that diversity on the campus is ever increasing and this is in part due to the Federal Pell Grant that is awarded to students. Discussion ensued on what types of resources are available to help students excel not only while in college but following college as well. Associate Director, Cathy Fogarty from Career Resources noted that it was important that as the job market changes, we as an educational institution needs to change academically to meet those market needs.

Chair's Report/Housekeeping

Chair Cynthia Fox notes that everyone should have received a notice to change the April 12th meeting time; please respond if you have not already. Sandra Starke has been invited to attend a meeting this fall as her work closely aligns with the mission of the UPPC committee.

The minutes from last year's UPPC meetings have not been posted to the Senate web-site yet; those are in the process of being added, so that the record of what has happened in the last few years at UPPC is complete.

The next point of concern is in regards to a procedural issue and how UPPC wants to handle presenters following their presentation. Do they need to leave the room following the presentation, or can they remain? Also, should a presenter also be on UPPC should they be allowed to participate in the deliberation process following the presentation? The chair, Professor, Cynthia Fox recommends that we always ask the presenters and any one on the council associated with the presentation to leave the room following the presentation so that the process is fair. Motion by Sanjay Goel that all presenters and any UPPC members associated with the proposal should leave the room during deliberations and can return once a decision is made. All approved, zero abstentions.

Change in order of presentation proposed by Fox to move new business to the beginning of the agenda.

Consideration of a proposal for Ph.D. in Electrical and Computer Engineering

Ann Marie Murray, Associate Provost for Program Development begins by ensuring all members have the most up to date copy of the handouts. She then proceeds to introduce the members of the Electrical and Computer Engineering program that will be presenting the proposal for the Ph.D.. Ann Marie then asks us to please take a look at the documents included with the proposal and CFI to ensure everyone has a copy. Letters from various stakeholders on campus including ITS, facilities, and libraries, these letters note they anticipate an increased demand on services. The final version of the LOI now includes the number of degrees needed which has been set to 75. Ann Marie now introduces Acting Chair for the Department of Computer Engineering, Randy Moulic.

Randy Moulic introduces himself and his goals and tasks associated with his role as acting chair. He has been tasked by Dean Kim Boyer to help lead the process of the B.S. in Computer Engineering becoming an accredited program. ABET evaluators will be looking at the quantity and quality of the faculty and how they are able to influence and impact student outcomes. Having both a graduate and Ph.D program is crucial to any B.S. program as it helps attract faculty and gives students the opportunity to see first-hand the types of research that is being conducted that impacts the field. With a good B.S. program you need a Ph.D. program; they go hand in hand together.

Assistant Professor Dola Saha in the department of Computer Engineering now introduces specific agendas and objectives that will be set for the Ph.D. in Computer Engineering. The Ph.D. in Computer Engineering will focus on four concentration areas where the goal would be for the students to conduct research. The four concentration areas are, Communications and Networking, Signal and Information Processing, Computer Engineering and Cyber-Physical Systems, and VLSI, Solid-State Devices and Materials. Along with the four concentration areas there will also be interdisciplinary work and it is expected that there will be synergies with departments like Math and Physics. The credit requirement of the program will be a minimum of 75 credits and the students can take two paths depending on if they are coming from the B.S. or the M.S. Four core areas of study have been outlined and the student will be expected to complete at least 15 credits on their chosen core area. The students will then be required to take at least another 6 credits within the ECE program to give them breadth of knowledge, along with 6 credits in Math and Physics as these concentrations are fundamental to Computer Engineering. Lastly, the student would take an additional 6 credits in any other field of interest outside the program, which will allow the students to bring another background of information into their research. The total time for

completion of this program will be seven years, with candidates ideally finishing in 6 years. The projected enrollment will be 30 students within the next five years.

Professor Sanjay Goel asks if the timeline will still apply for students going through the program part-time. For now the timeline would remain the same for part-time as it does for full time. When looking at the enrollments it seems that this program would be targeted at the full time student versus the part-time. Should there be more part-time students enrolling they would then look at re-evaluating the time-line, especially as it pertains to the completing the ECE qualifying exam which is set to occur after 2 years if enrolling in the program following the M.S., if enrolling in the program following the B.S. program students would have 3 years to take the qualifying exam.

By having this program approved we are meeting the high demands for employment, not only in the capital region but nationwide, and it will move us into a highly ranked public research institution. The program will have not only relations with other departments on campus but across institutions as well. Based on studies completed by the New York State Department of Labor it is projected that both short and long term job demands in the capital region and nationwide will increase. The mid-career pay for students with these degrees in the field is averaging at $142,000.

Professor James Collins now asks what the short-term market needs are? The response is that research has indicated that over the next ten years the market growth need for students with this degree would be 3,080 in total to the capital region.

Professor Michael Jerison asks what types of review have been completed prior to submitting the proposal on market needs and trends. Professor Ann Marie Murray informs the group that when completing the review they looked at our SUNY partners and evaluated exactly how many graduates they were getting in these areas and could we compete with this or is the market saturated. We also looked at the credit hours that peer institutions in the nation were requiring their students to take and evaluated how we fit in. Currently the market is not saturated and we find that our credit requirement is on the lower range for Engineering Programs but aligned with our current overall graduate school requirements on campus.

Professor Cynthia Fox asks what a normal course load is for students. The average hours per semester is 6-9 credit hours per semester. So before the qualifying exam they would need to finish 15 credits in the depth (or concentration) area within the 2 or 3 years depending on the track of the student.

How do we compare across the country as well as locally with for example RPI offerings? Assistant Professor Dola Saha states that the market demand is much higher than the current offerings and that they have looked at other institutions are found that credit-wise we are similar. Many other institutions are requiring around 82-96 credit hours of research. We are only requiring 75 credit hours to keep the program aligned with other graduate programs at the University and could also be an added burden on the cost to the students. RPI's current program was looked at and they currently offer a PhD in ECE and the 15-24 hours of courses in a focused area and 36-45 hours of dissertation research.

Is there a way for the departments or other sponsors to cover the tuition for the students? Assistant Professor Dola Saha states that most of the PhD students are supported by grant money, and the faculty should be able to get these grants and support these students. In these first years prior to grant establishment we have state faculty startups that help support this mission. After this all other PhD assistantships will be sponsored from the advisor. The only funding that we rely on from the University will be for TAs. Also, the rent

money that comes in helps pay the tuition and student assistantships, 45-50% of that goes to the University.

Professor Sanjay Goel motions to approve the PhD in ECE and the committee will make three recommendations to the proposal that include, comparison to peer and aspiration schools, course hours needed for graduation, and clarify full versus part-time expectations. The vote to approve was unanimous.

Consideration of a proposal for an MS in Digital Forensics

Professor Sanjay Goel presents his proposal for an MS in Digital Forensics. This would be a one year M.S. program and it is one that is critical in times like these as we keep seeing all these cyber hacks on companies. By having a M.S. program in this field it will allow us to gather the data and see the bigger picture of these attacks and connecting the dot and seeing the bigger picture. The B.S. program was launched two years ago and the expectation was to have around 100 students. The program has exceeded that target and currently has 180 students. This success has encouraged the department to start an M.S. program. This one year M.S. program will focus on providing students with in-depth knowledge on digital forensics. The one year program was decided after looking at market demands and finding that the market has a huge demand for these types of programs especially in this area as the demand for these degrees is high. The program is designed to be over the course of 12 months and will consist of a fall, spring, and summer schedule for a total of 36 credit hours. This program will be of a very high quality with the goal of raising the program to the next level; to achieve this the program has been created to have 30-36 students each year. Currently the job market for these positions is extremely high with demands in the thousands from agencies like the CIA, FBI, etc. Due to these conditions we anticipate a high success with rate similar to what was seen in the B.S. program. The funding for the additional two faculty that would be needed to administer this program has been awarded in the Compact Proposal, the courses have been defined, the syllabus have been created, and we have reviewed the proposal with industry experts and alumni in the field. Due to the nature of this program and wanting to have a high quality program, students without the necessary prior background credits will be required to take a "boot camp" that will prepare them for the course requirements.

Professor Cynthia Fox asks what a normal course level is and will the students be taking 5 classes a semester? Professor Sanjay Goel responds that this is normal within the business program and that this program is designed to be intensive and due to this they will only be accepting the top students that can handle the workload associated with a program of this caliber.

Associate Director of Career Services, Cathy Parker asks whether or not the plan would include opening this program up to a traditional two year program? Professor Sanjay Goel responds to this stating it would be manageable to expand the program as long as the demand is there and additional resources are acquired to support this expansion.

Professor Jim Collins asks that the sense of the department and Professor Sanjay Goel is that by offering this program as one year full-time only student program is the best way to implement this program, correct? Professor Sanjay Goel responds that the program is seeking only high quality students that can dedicate their time to this program. That is not to say though that if an outstanding student wanted to take the program part-time they couldn't. They could take fewer classes each semester and finish the program in that manner. The one year program is the recommended course of completion but it is not required.

Professor Michael Jerison asks if he can expand on what overlap digital forensics has with cyber security, as well with Homeland Security? Professor Sanjay Goel responds with the following; Cyber security is about barrier defense and it fails because of human errors, we click on links, etc. that open up the system for attack. Digital Forensics takes it to the next level where you are looking past the barriers and into the networks. Homeland Security is more focused on the intelligence aspect whereas our focus will be corporate intelligence.

Next, the question is asked, what is the internet of things? Professor Sanjay Goel responds that over the next couple decades there will be 3 major developments that will change technology fundamentally. The three major developments are smart ware, self-driving, and human implantation. A common bond in these three developments is communication and sensors. This technology is going to drive the future of information technology.

Associate Professor Mei Chen asks the question of since this field is very broad and specialized, how will the students reach the goal of depth of knowledge in one year? Professor Sanjay Goel responds that in many cases this is the second higher level course for many students as they will have seen these basic fundamentals at the lower level. For those students without the basic background and understanding they will be required to take a "boot camp" course to prepare them for this intense program. The faculty will be teaching the "boot camp" and it will consist of a week in the beginning of the summer prior were they provide all the materials needed, and then a two week period before the school year begins where the faculty will evaluate them on the various subjects they need to know.

Professor Cynthia Fox called for a motion to accept the program with the recommendation to soften the language of the proposal to focus on the credit requirement versus the one year program. The vote to approve was unanimous.

Renaming of Department of Educational Administration and Policy Studies

Professor Mitch Leventhal speaks on behalf of the Educational Administration and Policy Studies department after a unanimous vote from the faculty to change the name from Educational Administration and Policy Studies to Educational Policy and Leadership. This change is proposed to better reflect the department's current offerings, better reflect the profession, and further the marketing and enrollment efforts as the current name does not align with the department mission.

Professor Cynthia Fox called for a motion to approve the name change to Educational Policy and Leadership. The vote to approve was unanimous.

Enrollment Figures

Interim Provost, Darrell Wheeler has received the enrollment figures and shares the following. Undergraduate enrollment is 13,139 which is up just under 2% based on 15-16. Graduate enrollment is at 4,140 which is up about .2%. Although, these numbers are both up they are under the fiscal year 16-17 projections set by the departments so there is still some work to do to meet our targets. In terms of retention we are looking at around

an 84% retention between freshman and sophomores, Masters are at about 85% retention, and Ph.D. is at about 78%.

Report from Facilities Committee:

Professor Sridar Chittur speaks on the Facilities Committee meeting that occurred where Vice President James Van Voorst presented on the construction plans on campus. One of the topics brought up in this meeting with how do we address items such as emergency issues, buildings being remodeled, community relationships, and ensuring that the grounds and buildings are appealing to students, parents, and perspective students.

Report from the Resource and Planning Committee

Professor Mitch Leventhal speaks on the Resource and Planning Committee where Vice President James Van Voorst spoke and gave a high level view of the budget on campus, where it comes from and how the funds are used. Most of the conversation was geared towards understanding the budget, but there was some discussion on perhaps adapting a performance based budgeting system.

Compact Planning Discussion

Professor Cynthia Fox addresses the Compact Budget Process and how the UPPC will be consulted during the process. The compact process is now two years in and there is a need to establish a process on where the senate and UPPC fit in. Professor Jim Collins also brings up the need for understanding the process, the role of UPPC and the senate in the process so they can successfully hold up to the core principles set forth, and what type of evaluation they have. He asks about the assessment of the programs that are being funded.

Vice President James Van Voorst speaks to the current Compact Process and the current model they are following. The current document states that the UPPC will be consulted on the final decisions regarding Compact awards. The final decisions are completed for proposals that are a year away, so that this governing body can consult on the implementation process of the awards that have been approved for the following fiscal year. The current process works its way from the individual to the Dean's and Vice President's and eventually to the Committee. A major goal that was set forth by former President Jones was to encourage collaboration between the units and that is what we hope is being fostered through the process as it moves along between the various stakeholders in the process. This year is the second year and the decisions made two years are just beginning and we are now tracking those commitments and we will meet with the Resource and Planning Committee on where we stand on the items approved within the compact and how we are meeting the requirements set forth in the individual proposals. Following this conversation the goal will to be to continue having these conversations with the Resource and Planning Committee that will then report to UPPC.

Meeting adjourned at 4:15.