K.10.10.10 F

MINUTES OF THE UNIVERSITY SENATE

March 21 minutes are attached

The March 7, 1989 meeting of the University Senate was called to order by Chairman Gary Buterbaugh at 3:25 p.m. in Pratt Auditorium.

On a motion by Senator Duntley, seconded by Senator Nastase, the minutes of the February 1989 meeting were approved as published, with the following corrections:

1. Abrams was present, not absent.
2. Page 1: Correct spelling--Randy Siko, President & Vice President respectively (not Chair and Vice-Chair)
3. Page 5: at end of paragraph concerning the Spring Hill Commission report, add "APPROVED
4. Page 6: at end of paragraph approving the Final Examination Policy (Graduate), add: "effective Spring Semester 1989-90".

No changes were made to the current agenda order for the March 7 meeting.

President Welty's report to the Senate is shown as Attachment A.

The following Senators were excused from the meeting: Aghbar, F. Anderson, Angello, Bellak, Blacksmith, Broad, Butzow, Cahalan, Caraway, Cignetti, Coppaway, T. Cunningham, Hall, C. Johnston, Krishnan, Mills, Newell, Rearick, Shields, Staszkiewicz, Stockholm, Venus, and Wonders. Also absent were Senators Steven Abrams, Ali, Bambery, Bright, Brode, Brown-McGowan, Caldwell, Cercone, Choudbury, Conley, Coughlin, H. Cunningham, Curey, Dakak, Dean, Decoster, Durbin, Geible, Green, Halapin, Jacobson, Kish, Krise, LaRue, Lauer, LeBlanc, Lipsky, Luciano, Mahmud, March, J. Miller, A. Miller, Millward, Mitchell, Moderelli, Morris, Murphy, T. Neal, Nelson, Norberg, Novels, Pillion, Russell, Saxton, Schmitt, Simpson, Sommer, Syty, Tobin, Vimalachan, Walker, and Wheeler.

Chairman Buterbaugh reported to the Senate on the following items:

1. Grade Appeals Policy: APSCUF Rep Council has asked for an interpretation of the wording in the policy and the amendment as passed by the Senate.
2. A letter came from the College of Natural Sciences and Mathematics after the Senate approved BE 111 as a Liberal Studies course to serve as the Math requirement for ASBED students. The Liberal Studies Committee is working on this; Senate action may have to be rescinded.
3. Reserve May 9 for a special meeting of the Senate.
4. Committees which have not yet reported to the Senate during this academic year should do so and have only two meetings left.

Senator Reich reported to the Senate that on Tuesday, March 28, 1989 at 7 p.m., hopefully in Pratt Auditorium, there will be an important meeting to propose the creation of a new Student Governing Association (yet unnamed). This will result in one unified association of students and he urges attendance at this meeting by administrators, faculty, staff and students. This new body must receive approval by the Senate, the Co-op, and the Board of Trustees.

The Rules Committee, chaired by Senator Tackett, listed the following items of information:

1. Dates of last two Senate meetings: April 4, 1989 and May 2, 1989 (reserve May 9 for additional meeting
2. First reading of proposed By-Laws change (to be debated in April):
   Change the appointed members of the Committee on University Development to the Vice President for Finance and Director of Campus Planning, instead of the present Vice President for Administration and the Dean of Admissions.
   RATIONALE: The specified membership was appropriate when the bylaws were written in 1970. Currently, it is more appropriate for the Vice President for Finance and the Director of Campus Planning to serve on the committee. For the past several years it has been the practice of the president to appoint the Director of Campus Planning to the committee in place of one of the specified administrators.

3. Senate elections will be conducted on March 22, 1989 (all day). Nominations are presently being accepted.

The Research Committee, chaired by Senator Stacy, moved approval of the revision of the Senate Research Grants Program, resulting in the creation of two separate programs--THE IUP SENATE RESEARCH FELLOWSHIP AWARDS (Attachment B1-B9) and THE UNIVERSITY SENATE RESEARCH COMMITTEE AWARDS (Attachment B10-B13), as attached to the agenda.

NOTE: If passed, the following time table and disbursement will be implemented:
--The new program will become operative using funds from the 1990-91 fiscal budget.
--Faculty may apply for Faculty Research Fellowship awards beginning with the Fall Semester, 1989.
--Faculty may apply for Senate Research Committee awards beginning with the Fall Semester, 1990.
--One-third of the total budget will be used to support Research Committee awards; two-thirds will be used to support Research Fellowship awards.

Points of discussion or information:
--60% of the funds are to be expended during the first three meetings of the Committee
--40% of the funds are to be expended during the last two meetings.
--status of Creative Teaching Awards? --comes under Senate Research Awards (#3 on page B11)
--friendly amendment, Page B2:
a. Title: APPLICATION GUIDELINES
SENATE RESEARCH PROGRAMS
b. I. Purpose of the Program (B2)
II. Senate Reserach Fellowship Awards (B2)
III. Senate Research Committee Awards (B10)
c. On Page B4, under "Proposal Narrative": A: Results --strike the last sentence which read: In order to encourage new investigators, faculty with no previous Senate grants receive 5 points.

A motion by Senator Begg, seconded by Senator Marc Brown, to add "not to exceed 1/2 of the grant award" following "Summer Faculty Salaries" in Item #8 on Page B8 was defeated following extensive discussion (Duntley/Dudt motion closed debate on this issue).

A motion by Senator Grau, seconded by Senator Nastase, to entirely eliminate #8 on Page B8 was defeated by a vote of 24 For, 44 Against and 7 abstentions. (See Attachment A on minutes of 3/21/89 meeting for Senate Research Grants Program)
At that point, a call for the quorum was made by Senator Grau. As a quorum was not present, the meeting was adjourned at 4:45 p.m.

ANOTHER MEETING OF THE SENATE WILL CONVENE ON TUESDAY, MARCH 21, 1989 in Pratt Auditorium to complete the March 7 agenda.

Respectfully submitted,

Robert Sechrist
Secretary of the University Senate

ATTACHMENT A

REPORT TO THE UNIVERSITY SENATE
March 7, 1989

I wish to report the following items to you today:

The State System of Higher Education's budget hearings in both the House and Senate have been held. The Chancellor advocated support for the System's Budget Request that was approved by the Board of Governors in October, 1988. The report calls for a 13.4 percent increase plus several line items, which I have previously reported to you. The budget hearings went very well in both the House and the Senate.

Lt. Gov. Mark Singel will be on campus on March 16, 1989 to make an announcement of a major grant award to the University which will establish the Southwest Pennsylvania Energy Center. In addition, he will also speak at a dinner focusing upon the cogeneration project in the evening.

Christopher Johnston has been appointed as a student member of the Council of Trustees. Mr. Johnston is a senator.

The Council of Trustees affirmed a recommendation which had been made earlier to award an honorary doctorate to Justice Sandra Day O'Connor who will appear on the campus on November 15, 1989, as the Nell and Sam Jack Distinguished American Lecturer.

There are several activities of the Long-Range Planning Committee. On April 4, 1989, Dr. Allan Ostar, President of the American Association of State Colleges and Universities (AASCU) will be on campus. He will make a presentation titled, "Anticipating the Future of Regional Comprehensive Universities" at 10:30 a.m. in the multipurpose room of the HUB. I urge all members of the Senate to attend this session. The Long-Range Planning Committee will then meet with him later that day for further discussion.

The retreat which has been previously announced as part of the process to begin the development of the next five-year plan will be held on April 27-28. The Long-Range Planning Committee, key campus leadership, and members of the Administrative Group will participate in the retreat which will be the preliminary step to the development of the next Long-Range Plan for the University.

The University Center Board of Directors has recently approved the establishment of the Harrisburg internship semester program, which will provide an opportunity for a faculty member from the System to spend a year in residence supervising interns from all fourteen universities, as well as conducting a seminar for the interns. The program is designed to provide a significant internship experience for students in the Capital working with state government and related agencies. Formal announcement of the program will be made in the near future and information will be available on the program which will start beginning with the 1989-90 academic year.

JDW10/jab
3/7/89

MINUTES OF THE UNIVERSITY SENATE

The special March 21, 1989 meeting of the University Senate was called to order by Chairman Buterbaugh at 3:35 p.m. in Pratt Auditorium.

The Chair's announcements included:

1. Agenda for the April 4, 1989 meeting is due to Secretary Sechrist no later than next Monday.
2. The APSCUF Rep Council acted without our input on the question of some wording in the Grade Appeals Policy passed by the Senate in February. APSCUF has been asked to reconsider it and they have indicated that they will do so in April.
3. Ruling of the Chair concerning the schedule for today's meeting:
   --we will divide the grants program proposal into four segments, as follows: spending a maximum of 15 minutes per segment in discussion:
   a. creative teaching awards
   b. compensation
   c. how do we encourage new researchers?
   d. general discussion

MOTIONS WHICH WERE MADE, and their disposition:

1. Walz/Ali - to change the title of the Senate Research Fellowship Awards to "Senate Research and Creative Teaching Fellowship Awards"
   ---REPLACED with the following substitute motion:
   Duntley: to change title to simply: SENATE FELLOWSHIP AWARDS
   SUBSTITUTE MOTION PASSED.
2. Motion by Senator Grau, seconder unknown, to completely remove ITEM #8, under Budget Stipulations, B. Acceptable Expenses.
   MOTION DEFEATED.
3. Walz/Juliette motion to add the following clause at the end of ITEM #1, under Budget Stipulations, A, General: . . .requested; except when the applicant is only requesting a summer contract whose total cost would exceed $3500, the higher amount can be awarded.
   MOTION DEFEATED.
4. Woolcock/Walz - to send this proposal back to the Committee for them to tell us how the six different categories would be priority ranked.
   MOTION DEFEATED.
5. Oblitey/Ames - to change ITEM #1, under Budget Stipulations, A. General, to read: If two or more faculty FROM THE SAME DEPARTMENT submit applications, a maximum of $7,000 may be awarded.
   MOTION DEFEATED.

SEE ATTACHMENT A for REVISED SENATE GRANT PROGRAM as <u>approved</u> by the University Senate.

The Non-Credit Committee, chaired by Senator Gates, moved that the University Senate endorse the Proposed Culinary Arts Program at the Punxsutawney Campus, as detailed in Attachment B. The motion was approved by the Senate.

The Curriculum Committee listed the following for Senate Information:

1. Course Title and Number Changes

CR 101	General Admin. of Justice	TO	CR 101	Crime and Justice Systems
EN 101	English I	TO	EN 101	College Writing
EN 102	English II	TO	EN 102	Research Writing
EN 201	English III	TO	EN 121	Introduction to Literature
GS 121,122	General Geology I	TO	GS 121,122	Physical Geology
GS 131,132	General Geology II	TO	GS 131,132	Historical Geology

MU 101	Intro to Music	TO	MH 101	Introduction to Music
MU 301	Music History I	TO	MH 301	Music History I
MU 302	Music History II	TO	MH 302	Music History II
MU 303	Music History III	TO	MH 303	Music History III
MU 324	Music, the Classic Era	TO	MH 324	Music of the Classic Era
SA 482	Chemical Process Safety	TO	SA 472	Chemical Process Safety

2. Provisional Approval for FN 140 - Nutrition and Wellness

As moved by the Curriculum Committee, the following were APPROVED by the Senate:

1. NEW COURSES

GEOGRAPHY DEPARTMENT

GE 103 - Introduction to Human Geography - 3 s.h.
An introductory course designed to acquaint students with the major concepts and themes in human geography. The course focuses specifically on geographic processes and provides an understanding of how geographers organize and interpret the world around them.

GE 104 - Geography of the Non-Western World - 3 s.h.
A beginning level course which uses the developing world as the mechanism for introducing students to the discipline of geography. The course uses techniques of geographic analysis to explore causes, characteristics, and sequences of massive underdevelopment.

GE 213 - Cartography I - 3 s.h.
This course introduces students to principles of thematic map construction. Emphasis -s on the techniques of choropleth mapping and the production of scientific graphs and charts.

FRENCH DEPARTMENT

FR 301 - Portraits of Women in the French Novel - 3 s.h.
Explores the polarity of the treatment of female characters in the French novel. Explores differences of treatment by male and female writers through inclusion of women novelists. Provides a chronological survey of the development of the novel in France from the seventeenth to the twentieth centuries.

COMPUTER SCIENCE DEPARTMENT

CO 205 - Programming Languages for Secondary Schools - 3 s.h.
Prerequisite: Enrollment is limited to education majors. Previous experience with microcomputers is strongly recommended. Does not count toward a computer science major. Credit toward graduation will not be given if this course is taken after completing 6 or more credits of computer science courses. Provides an introduction to the three high level programming languages most commonly used in secondary education; Pascal, LOGO, and BASIC, with particular emphasis on Pascal. Also includes a comparative study of the control structures and data structures present in these three languages. This course is intended to establish a solid foundation to prepare prospective teachers of computing courses K - 12.

PHYSICS DEPARTMENT

PY 352 - Applied Physics Laboratory - 0C-6L-3SH
Prerequisites: PY 231, PY 150 or permission of instructor. In this laboratory the student is introduced to much of the fundamental equipment used in industry. The student is trained in the operation and proper use of this equipment through a series of experiments that teaches him/her signal detection and analysis including data acquisition by computer. The student will receive instruction on the proper methods to be used for various oral and written presentations.

PY 353 - Solid State Electronics Laboratory - 0C-6L-3SH
Prerequisite: PY 352 or permission of instructor. In this laboratory the student will encounter a number of areas of current interest in semiconductor technology. The student will perform experiments and learn skills in such areas as device process simulation, device simulation, measurements of semiconductor materials, and measurement of device parameters. The student will also be instructed in the proper presentation of written and oral reports.

PY 475 - Physics of Semiconductor Devices I - 3C-0L-3SH
Prerequisites: PY 231, PY 242, PY 342 or permission of instructor. This course develops the basic foundation for a study of the theory of semiconductors. Elementary quantum concepts, the band theory of solids, electrical properties of solids, growth of semiconductor materials, and principles of semiconductor devices are discussed.

PY 476 - Physics of Semiconductor Devices II - 3C-0L-3SH
Prerequisites: PY 475 or permission of instructor. This course discusses the physics and operation of a number of discrete devices. These include bipolar transistors, MOSFETS, JFETS, CCDs, various diode technologies, photovoltaic and photoconductive devices, solid state lasers, and light emitting diodes.

2. REVISED COURSE

GE 313 - Cartography II - 3 s.h. (Previously Advanced Cartography)
Prerequisite: GE 213. Gives an understanding of the compilation and use of maps and quantitative data. The course develops skills essential to the construction of various types of maps.

3. PREREQUISITE CHANGES:

CHEMISTRY DEPARTMENT: CH 341, Physical Chemistry I will replace CH 321, Quantitative Analysis as the prerequisite for CH 322, Instrument Analysis.

MATHEMATICS DEPARTMENT: MA 171, Introduction to Linear Algebra, is added as a prerequisite to MA 271, Introduction to Algebraic Structures.

For the following list of courses, change the prerequisite from MA 271 to MA 271 "with a C or better grade":

MA 353 - Theory of Numbers	MA 355 - Foundations of Geometry
MA 371 - Linear Algebra	MA 421 - Advanced Calculus I
MA 427 - Intro to Topology	MA 476 - Abstract Algebra

4. REVISED MAJOR

B.S. and B.A. in Computer Science: Credit for CO 320, Software Engineering Practicum, and CO 493, Internship in Computer Science, may not both be counted toward the degree in Computer Science.

5. REVISED MINOR

Department of Mathematics: The course MA 102, Finite Mathematics, will no longer be included in the list of courses which are acceptable for the minor in Mathematics.

6. COURSE REVISIONS TO MEET LIBERAL STUDIES CRITERIA

GE 103	Intro to Human Geography	Soc.Sci.
GE 104	Geog of Non-Western World	Soc.Sci; Non-West
FR 301	Portraits of Women in French Novel	Elect.
CR 101	Crimes & Justice Systems	Soc.Sci.
MA 101	Foundations of Math	Skill Math

MA 102	Finite Math	Skill Math
MA 110	Elementary Functions	Skill Math
MA 121	Calculus I (Bus,Nat.Sci. & SS)	Skill Math; Elect
MA 122	Calculus II(Bus,Nat.Sci. & SS)	Elect
MA 123	Calculus I (Physics & Chem)	Skill Math; Elect
MA 124	Calculus II(Physics & Chem)	Elect
MA 127	Calculus I	Skill Math
MA 151	Math Elem Teacher I	Skill Math; Elect
MA 152	Math Elem Teacher II	Skill Math; Elect
MA 214	Prob & Stats (Business)	Elect
MA 216	Prob & Stats (Nat.Sci.)	Elect
MA 217	Prob & Stats	Skill Math; Elect
EN 101	College Writing	Skill
EN 202	Research Writing	Skill
EN 121	Intro to Lit	Hum: Lit
SP 363	Dev. Sp-Am Cult & Lit I	Elect
SP 364	Dev. Sp-Am Cult & Lit II	Elect; Non-West
CH 111-112	General Chemistry	Lab Sci

7. NEW PROGRAM - PHYSICS DEPARTMENT -- B.S. in Applied Physics
SEE ATTACHMENT C for Program as approved by the University Senate.

As all business on the March 7, 1989 agenda had been acted on, the meeting was adjourned at 5 p.m.

Respectfully submitted,

aj Nastase

Anthony J. Nastase
Secretary ProTem, University Senate

Senators excused from the March 21 meeting included: Angello, Wonders, Nee, Johnson, LaRue, Caldwell, Reigle, Choudhury, Hall, Brown-McGowan, Morris, Moorhead, Blacksmith, Chaubey, Dugan, Cignetti, Knowlton, Neal, Cahalan, Caraway, Costa, Modrak and Marx. Also absent were Senators Steven Abrams, Andrew, Baldauf, Bambery, Barker, Begg, Bianco, Bormann, Bright, Brode, Camp, Conley, Coppaway, H. Cunningham, Curey, Dakak, Dean, Decoster, Durbin, Green, Halapin, Hynson, Kirkpatrick, Kish, Krise, Krishnan, Kroah, Lauer, Lipsky, March, McCauley, McCreary, J. Miller, L. Miller, Millward, L. Mitchell, Moderelli, T. Neal, Nelson, Nise, Novels, Pennington, Pillion, Reich, Russell, Schminky, Schmitt, Shields, Simpson, Smits, Stasziewicz, Syty, Tiger, Vimalachan, Washington, and Wheeler.

Revised Senate Grant Program

Overview

* The revised program will offer two types of awards:

  Senate Fellowship Program - Similar program to already existing research grant program.

  Senate Research Committee Awards - $1500.00 grant program which allows faculty flexibility to apply throughout the academic year directly to the Senate Research Committee in a number of areas to meet individual faculty needs.

* The revised program will become operative using funds from the 1990-91 fiscal budget.

* Faculty may apply for the Fellowship awards beginning with Fall semester 1989.

* Faculty may apply for the Research Committee Awards beginning with Fall semester 1990.

* One third of the total budget will be used to support Research Committee Awards; two thirds will support Fellowship Awards.

Purpose of Senate Grant Program

The Senate Grant Program is a short-term, project-oriented program of research and creative project support. The primary objective of the program is to provide a means of supporting scholarly activity and developing teaching excellence where other means of support do not exist on campus. Additional related objectives of the program include the following:

1. To support the research needs of as many faculty as possible.

2. To offer IUP faculty a flexible program which will meet varied research and teaching needs.

3. To provide "seed" support for projects that are likely to develop into more extensive undertakings eligible for funding from an external source.

4. To provide summer support for faculty who want to conduct research, or design creative teaching projects.

5. To stimulate faculty in the areas of publication, professional presentations, artistic endeavors, and external grant applications.

Senate Fellowship Awards

The Senate Fellowship Award Program is open to IUP faculty and administrators. Awards are made on the basis of a yearly competitive grant competition. Grants up to $3,500 per investigator are awarded for research, scholarly activity, and creative teaching projects by the Associate Dean for Research upon the

recommendation of the University Senate Research Committee. While faculty may submit joint proposals, no individual may submit or be part of more than one fellowship grant proposal each year. No proposal may be submitted to more than one college committee for review and ranking.

The proposal is evaluated by a college research committee (CRC) composed of one faculty representative elected from each department of the college and the college dean or his/her designee, who shall chair and organize the committee. The function of the CRC is to evaluate the merit of each proposal and to make a recommendation to the University Senate Research Committee (USRC) by submitting to the USRC a ranked list of all proposals submitted in the college.

Proposals are ranked by the CRC on the basis of priority scores (maximum 30 points) assigned by committee members and averaged by the CRC committee chair. The 30 points will be distributed as follows:

A. Results: Previous Research (5 points)

Points will be awarded on the basis of success over last three senate grants in producing publications, presentations, exhibits, extramural grants. If no previous senate grants were received, points will be awarded on the basis of successful research experiences in the area for which the applicant is requesting funds.

B. Project Description (20 points)

The project will be evaluated on (1) originality of proposed project, (2) feasibility of completion during grant period, (3) adequacy of project design, (4) overall evidence of the investigator's ability to carry out the project.

C. Budget (5 points)

Points will be awarded on the basis of the detail and accuracy of the proposed budget and budget explanation.

Before averaging scores on each proposal, the committee chair will delete the highest and lowest scores. When ties in the ranking occur, rankings are set through discussion and vote.

After it receives ranked proposals, the USRC will establish a priority schedule for the proposals that have been ranked by the CRCs. The USRC will not alter the order of the ranking of any list forwarded to it by the CRCs. However, the USRC will determine the relative importance of the projects referred to it by all of the CRCs and establish its own ranking of all proposals submitted. This ranked list will be submitted to the Associate Dean for Research in the Graduate School who will distribute funds beginning with the highest ranked proposal and continuing until funds reserved for the program are exhausted.

After the fellowship project has been completed, the grantee will submit a final report to the Associate Dean for Research in the Graduate School. The report should stress publications, presentations, and extramural grants which were achieved as a result of the senate fellowship award. No new awards can be made to any grantee who has not submitted a report for the previous project.

Budget Stipulations

A. General

1. Senate Fellowship Grants have a maximum of $3500.00 per individual participating in the project. If two or more faculty submit applications, a maximum of $7,000 may be requested.

2. Funds must be spent or encumbered within IUP's specified fiscal year: July 1 to June 30. Wages and other personnel costs must be spent within the specified fiscal year, while IUP purchase cutoff dates must be followed for other items. Please note that personnel costs must include salary and fringe benefits. Please consult the Payroll Office (x2510) for this information as the application is prepared.

3. Standard IUP and SSHE forms and regulations must be followed in spending award money. For example, if travel is involved, all SSHE and local regulations must be followed: Request for SSHE Car Forms and all other applicable forms must be submitted.

4. All items purchased are the property of IUP.

5. On-campus services and facilities must be used when there is a choice.

6. The IUP Budget Office and Purchasing Office should be consulted when questions arise concerning items to be purchased with University funds.

B. Acceptable Expenses

1. Equipment

2. Books and microfilms

3. Interlibrary loans

4. Reproductions of material by IUP facilities on campus: printing, copying, and filming, duplication and reproduction by an outside source of material not readily accessible.

5. "Office" and "educational" supplies, as defined in SSHE system regulations.

6. Undergraduate student time, arranged either at a fixed price for the job or at the hourly rate currently authorized by IUP.

7. Graduate student time, arranged either at a fixed price for the job or at the hourly rate currently authorized by IUP.

8. Summer faculty salaries, normally not to exceed three weeks. This salary is to be computed in terms of the individual's regular contract. This expenditure is to be made for work which is to be performed during the summer. Again, salary and fringe benefit rates are available from the Payroll Office (x2510) as an application is prepared.

9. Replacement salary for the fall and/or spring semesters, normally not to exceed one-fourth time. The applicant must submit with the proposal the written approval of the department and the appropriate college dean.

10. Travel for research purposes according to IUP regulations.

C. Unacceptable Expenses

1. Thesis and dissertation costs. (Discuss other possible mechanisms of support with your college dean and the Dean of the Graduate School and Research.)

2. Duplicate awards with SSHE Grant Funds. While an individual may use SSHE grant funds and senate funds to complete the same project, funds may not cover duplicate items.

3. "Submission" and "application" costs for articles and books. (Once again, alternative funding possibilities should be explored.)

4. Graduate Assistants. (Graduate assistantships are awarded by the Graduate School.)

5. Tuition and associated costs of lessons and study.

University Senate Committee Awards

A. Purpose of USRC Awards

The basic purpose of the Senate Research Committee Award Program is to encourage research, creative activity, and meaningful curriculum revision by members of the IUP faculty or academic administrators. The USRC awards were the result of USRC recognition that there is a need to support projects which arise throughout the year. The committee envisions that the awards will allow faculty the flexibility to apply throughout the academic year directly to the Senate Research Committee in a number of areas to meet their immediate needs.

B. Types of Awards

The USRC award program supports faculty who wish to develop an innovative teaching project, an interdisciplinary research or teaching project, a cooperative research program with industry and/or the local community, a research project which will allow faculty and advanced students to work together as a team. It also supports new investigators who have never had a senate grant before. Finally the program supports faculty to take advantage of unique, rapidly evolving, or unexpected research opportunities (ex. acceptance of a book or publication or acceptance of a paper to be read at an international conference.)

C. Program Characteristics

The USRC awards are small grants with a maximum of $1,500. Submitted proposals must fit in one of the following categories:

1. Grants to develop cooperative programs with industry or local community agencies. Grants to investigate an interdisciplinary research project.

2. Small Research Grants to allow faculty to take advantage of unique rapidly evolving, or unexpected research opportunities (ex. acceptance of a book for publication). Projects proposed must demonstrate both the standards of quality and excellence expected in the discipline or area, and the urgency or unexpected origin necessitating an immediate or rapid response to achieve the opportunity presented.

3. Grants for innovative teaching projects. Funds would be used to help defray faculty expenses as they design an innovative new course or substantially revise an old one.

4. Grants to read papers at international meetings. Given the limited ability of the Graduate School and the colleges to handle the expense of international travel, this program would support up to $1,500 in expenses for faculty who are submitting a paper to an international meeting. All awards are contingent upon the paper's being accepted.

5. Student Faculty Research Awards. This program would provide expenses for a faculty member and an advanced student to work on a research project together. The proposal must demonstrate that the student would be sharing research activities.

6. New Investigator Awards. Grants to initiate a research project for new faculty, five years or fewer at IUP, who have never held a Senate Fellowship Grant.

D. Program Limitations

USRC awards must be used for project expenses exclusively. No funds may be used for an investigator's summer salary or for released time during the academic year. In addition no faculty may receive more than $4,000 in Senate Award money during a single year. Therefore faculty who receive a Senate Research Committee Award may have to limit their participation in the Senate Research Fellowship Program.

E. Review Process

The USRC meets on the first Thursday of October, November, December, February, and March to evaluate proposals and make awards. The USRC will apportion resources so that funds are available for each award period. Applicants must forward a copy of the proposal to the Associate Dean for Research one week before the scheduled meeting. Proposals received later will be held for the next scheduled meeting. The Associate Dean for Research will announce results within one week of the meeting.

F. Final Completion Reports

Each awardee shall submit a report within one year after award is made. The report should document the project's activities and accomplishments, publication plans, and copies of publications, reports, or other products developed during the award period. A final report must be filed in order to be considered for future awards.

01/18/89

THE CULINARY SCHOOL AT PUNXSUTAWNEY

PROPOSED CERTIFICATE PROGRAM

INDIANA UNIVERSITY OF PENNSYLVANIA

Contact person:

Dr. Harold E. Wingard, Dean
College of Human Ecology/Health Sciences
216 Zink Hall
IUP
Indiana, PA 15705

412--357-2555

APPROVED BY THE UNIVERSITY SENATE - 3/21/89

THE CULINARY SCHOOL AT PUNXSUTAWNEY

CERTIFICATE PROGRAM IN CULINARY ARTS

Chefs are being employed at a more rapid pace than the average employment of all other occupations. These employment opportunities are anticipated to extend well into the 90's. The food service industry employs millions of people, and a career as a chef from a certified Culinary Arts program is a bright future.

APPROPRIATENESS TO MISSION OF UNIVERSITY: In 1983-84, the University's Long-Range Planning process resulted in the development of a five-year plan and the complete review of the University's Mission Statement. The Mission of IUP stressed the importance of providing continuing education and public service. IUP is in a unique position to fulfill the mission in the Punxsutawney area. Punxsutawney is a rural community with high unemployment and no access to post-secondary institutions other than IUP. The community has expressed its desire for IUP to develop such a program by raising the start-up funds to build the building (see section on resource sufficiency). The strategic Direction Statements for the State System of Higher Education has identified several distinguishing features for the fourteen universities. The Culinary Arts Program will help fulfill one part of Indiana University of Pennsylvania's mission which states ". . .the branch campus in Punxsutawney offers select courses in support of degree and non-degree programs as needed." This program will be a certificate program.

Indiana University of Pennsylvania is committed to the preservation, expansion, and transmission of knowledge in all its forms. Part of the IUP mission is to offer support to degree and non-degree programs at off-campus or branch campuses as needed. IUP is committed to providing training programs for adults to meet the cultural and professional needs of the community.

The proposed program in Culinary Arts is designed to provide basic training and education for chefs to enter employment areas of food service ranging from small restaurants, to industrial cafeterias, to restaurants with exquisite dining.

NEED: The U.S. Department of Labor, Bureau of Labor Statistics in Occupational Projections and Training Data estimate that the employment of cooks and chefs will increase faster than the average of all other occupations through the 1990's. Approximately 250,000 new workers are needed each year in the food service industry. The National Institute for the Food Service Industry says that each year there are at least 85,000 openings for cooks and chefs. The National Restaurant Association predicts continued growth within the food service industry. There are over 561,000 food service operations in the United States. Eight of every ten households "eat out"

regularly. Nearly 186 billion dollars were spent in food and drink sales in 1986.

Experienced chefs can earn $35,000 per year and more depending on experience and location. The average salaries are in the upper twenties for the less experienced.

Irwin Gelber, Chairman and Executive Chef at Newbury College in Brookline, Massachusetts; Frank Verheull, Director for the Academy of Culinary Arts at Atlantic Community College in New Jersey; Stephen Hall, Corporate Chef for Interstate Hotels Corporation; and Louis Ferretti, Executive Chef for ARA Services at MIT were consulted for program need and curricular planning. All indicated a dire need for a good Culinary Arts program, and agreed that Western Pennsylvania would be an appropriate site.

The Culinary Institute of America is continuing to grow and now has approximately 1,850 students and 90 chefs. Johnson and Wales College is expanding Culinary Arts services to southern states; the Academy of Culinary Arts in Mays Landing, New Jersey, is expanding from an 8,000 square-foot facility to a 32,000 square-foot facility; and the Sawyer School of Business in Pittsburgh, which began providing a program in Culinary Arts about two years ago, now has over 450 students in their program. A demand is present for skilled expertise in the specialized area of Culinary Arts.

The Culinary Arts program will provide individuals the opportunity to acquire specialized knowledge and skills to function as chefs. The program will be organized into specific areas of learning, or "blocks" of learning, which will require two academic years plus one 300-hour summer externship. Each segment of the curriculum will consist of five three-week "blocks" of approximately five hours of learning per day. Some variation may be implemented to provide a three-day working experience opportunity for students (i.e. Friday, Saturday and Sunday). A sample of the curriculum organization follows:

BLOCK	YEAR I - TITLE	BLOCK	YEAR II - TITLE
1	Intro to Culinary Arts	11	Intermediate Hot Food Prep
2	Fundamentals of Food	12	Wines Mix/Adv Table Service
3	Applied Culinary Skills	13	Advanced Baking
4	Intro to Hot Food Preparation	14	Institutional Catering
5	Intro to Garde Manger	15	Menu and Facility Design
6	Fundamentals of Baking	16	Advanced Classical Pastry
7	Intro to Dining Room Operation	17	International Food Prep
8	Basic Pastry	18	Classical Banquet Operation
9	Institutional Fd. Serv. Oper.	19	Gourmet Dining Room
10	Prin. of Purchasing/Cost Cont.	20	Prin. of Supervising and Mgt.

Each block will be assigned two (2) learning units and an institutional number less than 100. The following credit courses will also be considered for the program: A basic nutrition course, an English course, a mathematics course and a computer science course.

Nearly 75% of study will be "hands-on" experience, where students learn the culinary techniques. Different styles and techniques for menu planning, purchasing, preparing and serving food, as well as front and back of the house training techniques, are included.

ACADEMIC INTEGRITY: The adequacy and appropriateness of the proposed certificate in the Culinary Arts program will be accreditation by the American Chefs' Federation and approval by the State System of Higher Education in Pennsylvania. The proposed curriculum contains rigid guidelines which include a syllabus for each educational block. Each syllabus will present objectives, course content and directives, grading criteria, daily content and performance evaluation.

Several consultants provided input to the proposed curriculum. Final preparation of course syllabi will be completed following the employment of a director of the program. Consultants are listed in the previous section.

The program will provide for 80 to 100 students enrolled in two sessions, morning and afternoon. A director, three chefs and a secretary will complete the staff necessary for the program. Preliminary plans are to employ a director for the program as soon as possible, and have the director employ the remaining staff.

COORDINATION WITH OTHER PROGRAMS: There are no other programs within the SSHE system in Culinary Arts. The IUP proposed program will be self-supportive with little need to coordinate with private trade schools in Pittsburgh or the community colleges in Allegheny and Westmoreland Counties where various types of Culinary Arts programs are offered. Some coordination will be necessary to establish student part-time work sites and externship sites. Externship sites will be developed to meet the standards and objectives of the program. An advisory committee will be established including community members to assure a quality program.

PERIODIC ASSESSMENT: Curriculum evaluation is an ongoing process. Feedback will be obtained from students and instructors about each course in the planned curriculum. Externship affiliates will provide feedback about students' performances and skills they are expected to perform.

Performance evaluation will be a daily routine built into the educational block process. Finally, employers will be asked to provide evaluations of graduates they employ from the program.

RESOURCE SUFFICIENCY:

A. The Punxsutawney College Trust will support a $1,100,000 (to include equipment), 12,100 square-foot gross, one-story building renovation to be used exclusively for the Culinary Arts program. This building will be located on South Gilpin Street in Punxsutawney, PA which is approximately one mile from the Punxsutawney Campus. The Punxsutawney College Trust raised over $560,000 to support this renovation. The building was donated by T. W. Phillips Company of Butler, PA.

The complex will include a bake shop, hot kitchen, garde manger kitchen, ala carte kitchen, large and small dining areas, storage area, student commons, lobby, equipment room, necessary rooms and office space. The architectural firm of Akers, Erwin, Gasparella has completed design drawings for the renovation.

B. Computers - There is one computer room on the Punxsutawney Campus with five Zenith and five IBM computers, one main-frame, two graphic printers, one Epson printer and one Okida printer.

C. Library - There is a full-service library on the Punxsutawney Campus with computer ties to the main library on the IUP campus. Three-thousand dollars will be needed for Culinary Arts books and periodicals in 1989, and three-thousand dollars in 1990.

D. Enrollment - Projected student population is as follows:

January	1989	40 students
September	1990	80 students
September	1991	120 students

E. Staff - The director and two chefs will be employed on full-time appointments. One additional chef position will be used for "specialty chefs" to be brought in on a temporary, part-time basis to provide training on such topics as ice sculpture, etc.

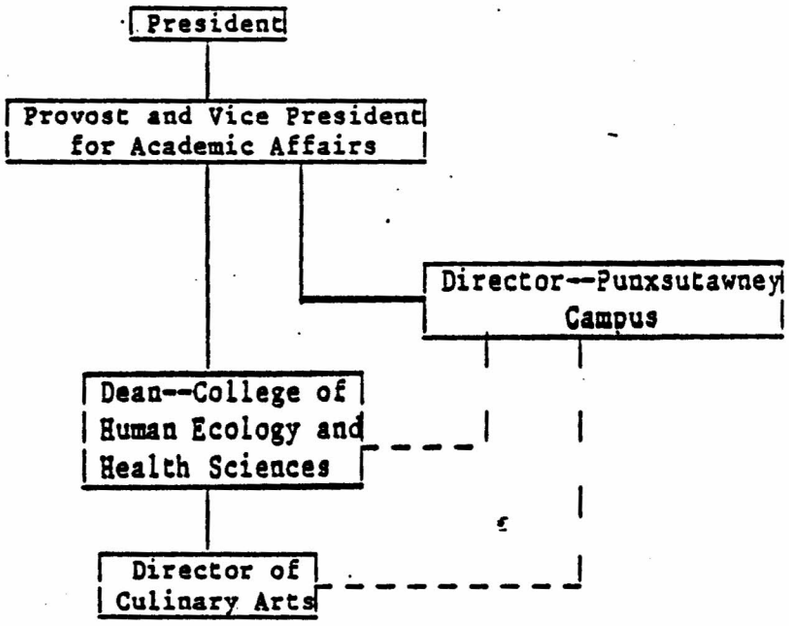
F. Program Support - Student fees will meet the cost of the program. Each student will pay approximately $7,000 per year for the program.

IMPACT ON EDUCATION OPPORTUNITY: The Culinary Arts Program will provide excellent opportunities for females, males, and minorities for a wide open job market. Starting salaries are usually in the $22,000 - $28,000 range per year. This program provides great opportunity for the "older" unemployed or the "older" person interested in job change, as well as the 18 or 19 year old.

ENDORSED BY THE UNIVERSITY SENATE, March 21, 1989

CULINARY ARTS

LINE/STAFF RELATIONSHIP



CATALOG DESCRIPTION

The Applied Physics major is designed to provide students with many interdisciplinary career options in science and technology.

The program consists of a core of courses from the liberal studies curriculum and the College of Natural Sciences and Mathematics. In addition, there is the option of five possible tracks:

1. Solid State Electronics
2. Computer Science
3. Chemistry
4. Biology
5. Geology

The complete course requirements are provided below.

This program will allow students to (1) enter directly into the industrial marketplace with confidence that their background will enable them to adapt with relative ease to the ever-changing challenges of high-technology; or (2) enter directly into graduate school in their chosen field of study with a minimum of preparatory study during their first year of graduate school.

Rationale for Program:

Technology has been producing changes in the nature of and divisions between academic fields. Traditionally, physics has been concerned with the study of basic principles at their most fundamental level. While the scientific instruments and devices of any period are certainly the products of these fundamental principles, physics is not device-specific, nor is it tied to particular applications. By concentrating on broad general topics, physicists have greater versatility and their knowledge has a much longer lifespan without obsolescence than professionals in engineering fields. This generality is purchased at the price of study in great depth and sophistication of the techniques of analysis. According to statistics of the American Institute of Physics , 50% of B.S. graduates in physics go on to graduate school in either physics or some related field. This simple fact, more than any other, conditions and standardizes undergraduate physics curricula. At IUP, a substantial majority of our graduates continue their studies in graduate schools.

By contrast, engineering studies are highly specific and product-oriented, always couching the general in terms of the specific, the materials available, the techniques and devices at hand, etc. As a result, the knowledge gained in an engineering program becomes obsolete rapidly and is discarded by industry after a short but useful work life. As a result, the fields of engineering send some of the lowest percentages of graduates to further graduate study, since the emphasis is on using immediately what the student has learned before it becomes outdated. The polarity between the physicist and the engineer has introduced a void in the middle which industry has tried to fill by using teams of physicists and engineers in collaborative work.

Recent trends have produced an unprecedented crush in enrollment applications for engineering schools. The four highest paid starting salaries for college graduates in 1986 were all in subfields of engineering. The message inherent in such numbers is not lost on prospective students. Because of (1) the inability of graduate schools to attract engineers that hold the Ph.D. and (2) the high cost of expanding the faculties required for engineering programs, engineering schools are frequently unwilling or unable to expand to meet the surge in enrollment demand. This leaves many highly qualified students unable to obtain admission to engineering schools.

Even more disturbing for the engineering schools is the substantial shifts of demand within the subfields of engineering. For example, the ever expanding demand for electrical or electronic engineers at one school of international prominence has produced an 80 to one student-faculty ratio in electrical engineering, while other departments enjoy ratios as low as two to one. The simple fact that so few engineers go on to graduate school eliminates the possibility of rapid expansion of faculty at such schools, even if the desire to do so were there. Thus, substantial numbers of qualified students will be turned away by engineering schools for the forseeable future. These students are generally attracted by the prospect of doing something useful at the forefront of technology for high pay. Their orientation is mainly that of engineering - hard work and study followed by early entry into the job market at a good salary - rather than the more contemplative investigation of the nature of fundamental ideas traditional to physics.

A common ground between these positions is in the B.S. in Applied Physics program as presented in this proposal. By applied physics we mean

physics with an emphasis on devices, technology, laboratory work and/or application of the techniques of physics to the problems in other fields of science. The Applied Physics curricula are NOT less rigorous than the traditional study of physics. In fact, in some institutions it is more rigorous. These applied physics curricula differs from traditional physics in its more immediate and specific application potential. The physics department has been investigating the development of an applied physics program for some time. In the fall of 1982 a formal survey of over 140 items completed by alumni of the physics department, disclosed the unanimous opinion that we should proceed toward establishing such a program. During the evaluation of our department in 1983 the external evaluators listed as a separate point in their final report:

> "2. We recommend the <u>establishment of a B.S. degree in Applied Physics</u>. The university offers a pre-engineering curriculum but no engineering program. It offers a popular computer science program which appears to stress the use of computers rather than the science of computers. At present, there appears to be a great opportunity for graduates having a pre-industry education in physics. This would be very similar to the present physics major but without the intensive mathematical skills (e.g., boundary value problems and partial differential equations) which are needed for quantum mechanics and graduate study in physics. Such a program would have time for a dash of computer science, a dash of electronics and perhaps some broad exposure to other sciences (chemistry, biology, geology). We believe there is a pool of students to which such a program would appeal. If

so, this would swell enrollments in many of the upper division courses. The very solid work in electronics, digital and integrated circuitry introduced by Dr. Berry and strengthened by Dr. Whitson provides a real nucleus on which to build. Several other members are well qualified to broaden the thrust of such a program by work in solid state, magnetism, nuclear physics, etc."

Similarly, following our program evaluation, local administrative review produced the "Proposed Action Plan" for the Physics Department, which listed this program among its objectives:

"9. The Department of Physics is urged to begin the development of an "applied physics" curriculum or concentration, and to determine the modifications and/or additional resources necessary to implement this program."

REQUIREMENTS

BACHELOR OF SCIENCE IN APPLIED PHYSICS

Liberal Studies: As outlined in Liberal Studies section with the specifications:

	56-57 SH
Mathematics: MA 123	4 sh
Natural Science: +CH 111, +CH 112	8 sh
Liberal Studies Electives: MA 124, Calculus II for Physics and Chemistry and Foreign Languages III and IV	10 sh
English Composition I and II	7 sh
Fine Arts	3 sh
Health & Wellness/ROTC***	3-4 sh
Humanities	9 sh
*Social Sciences	9 sh
Synthesis	3 sh

+Replaced by CH 113 and 114 for Chemistry Track
*3 sh must be devoted to study of a non-Western culture or civilization
**If ROTC is taken, decrease the number of free electives by 1 sh.

MAJOR: 28 sh

Required courses:

PY 131/141 - 132/142	Physics IC & IIC, Lect. & Labs	8 sh
PY 150	Computer Applications to Physics Laboratories	3 sh
PY 222	Mechanics I	2 sh
PY 231	Electronics	4 sh
PY 242	Optics	3 sh
PY 322	Electricity and Magnetism I	2 sh
PY 331	Modern Physics	3 sh
PY 352	Applied Physics Laboratory	3 sh

Other Requirements: 9 sh

CO 110	Introduction to Computer Science	3 sh
MA 241	Differential Equations	3 sh
CO 250	Introduction to Numerical Methods	3 sh

****TRACKS****

Solid State Electronics Track:

Requirements:		31 sh
CO 300	Assembly Language Programming	3 sh
MA 342	Advanced Calculus for Applications	4 sh
PY 323	Electricity and Magnetism II	2 sh
PY 342	Thermal and Statistical Physics	3 sh
PY 353	Solid State Electronics Laboratory	3 sh
PY 432	Advanced Electronics	3 sh
PY 475	Physics of Semiconductor Devices I	3 sh
PY 476	Physics of Semiconductor Devices II	3 sh
	Free Electives	7 sh
	Total Requirements	124 sh

Computer Science Track:

Requirements:		31 sh
PY 342	Thermal and Statistical Physics	3 sh
PY 353	Solid State Electronics Laboratory	3 sh
PY 432	Advanced Electronics	3 sh
PY 475	Physics of Semiconductor Devices I	3 sh
PY 476	Physics of Semiconductor Devices II	3 sh
CO 300	Assembly Language Programming	3 sh
CO 310	Data Structures	3 sh
CO 410	Computer Architecture and Microprogramming	3 sh
CO 450	Numerical Methods	3 sh
	Free Elective (consider PY 323)	4 sh
	Total Requirements -	124 sh

Chemistry Track:

Requirements:		31 sh
MA 342	Advanced Calculus for Applications	4 sh
CH 231	Organic Chemistry I	4 sh
CH 232	Organic Chemistry II	4 sh
*CH 323	Analytical Methods	4 sh
CH 341	Physical Chemistry I	4 sh
CH 342	Physical Chemistry II	3 sh
CH 343	Physical Chemistry Laboratory I	1 sh
Free Electives (consider CH 411, PY 342)		7 sh

Total Requirements - 124 sh

*CH 321 and CH 322 may be taken instead of CH 323 if a BA in Chemistry is also desired.

Biology Track:

Requirements:		31 sh
BI 105	Cell Biology	4 sh
CH 231	Organic Chemistry I	4 sh
BI 120	Animal Biology	5 sh
CH 323	Analytical Methods	4 sh
CH 351	Biochemistry	4 sh
BI	Two Biology Electives from the following: BI 263 Genetics, BI 361 Microbiology, BI 472 Radiation Biology, BI 352 Comparative Animal Physiology, BI 350 Cell Physiology, BI 401 Laboratory Methods in Biology & Biotechnology	6 sh
	Free Elective (consider a third biology elective from the above list, or PY 342)	4 sh

Total Requirements - 124 sh

Geology Track:

Requirements:		31 sh	
GS 121	General Geology I		3 sh
GS 122	General Geology I Laboratory		1 sh
GS 131	General Geology II		3 sh
GS 132	General Geology II Laboratory		1 sh
GS	Five Geoscience electives from the following: GS 321 Mineralogy, GS 325 Structural Field Geology I, GS 326 Structural Field Geology II, GS 440 Subsurface Geology, GS 362 Plate Tectonics, GS 412 Stratigraphy, GS 481 Special Topics: Geochemistry; GS 481 Special Topics: Applied Geophysics		15 sh
	Free Electives (consider PY 342)		8 sh

Total Requirements - 124 sh

APPROVED BY THE UNIVERSITY SENATE, MARCH 21, 1989