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**SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION**

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**MEMORANDUM**

**To:** Mr. R. Austin Gilbert, Jr., Chairman, and Members,  
Commission on Higher Education

**From:** Ms. Dianne Chinnes, Chairman  
Committee on Academic Affairs and Licensing

**Consideration of the**  
**South Carolina Instructional Technology Incentive Grant Awards**  
**FY 1999-2000**

**Background**

In 1999, the General Assembly appropriated \$500 thousand for the purpose of providing small grants to public institutions of higher education to support the development of technology-delivered coursework. In turn, the Commission issued a call for proposals that were due from the institutions by September 30. In view of the widespread need for support of course development across many higher education institutions, the program *Guidelines* stated that the terms of the awards would not exceed one year and the amount of a single award would not exceed \$12 thousand. In order to foster collaboration and cooperation among institutions, the guidelines provided that inter-institutional and system-wide awards would not exceed \$25 thousand.

The Commission received 67 proposals from 22 institutions totaling slightly over \$700 thousand. The breakdown of the number of grants by type of institutions is as follows:

Research Universities.....	22
Comprehensive Teaching Universities.....	24
Technical Colleges.....	20
USC Regional Campuses.....	1

All proposals were sent to three evaluators, at least one of whom was from out-of-state. Proposals were evaluated by all readers according to ten equally weighted criteria that were described in the proposal *Guidelines*. The readers' scores for each proposal were totaled and the proposals were ranked in descending order. Readers' comments were also noted, although no scores were changed based on those comments. The scores and comments provided a rather clear case for those proposals which stood out as strong and those grants which had substantial weaknesses. Based on the proposal *Guidelines* and readers' comments, and following discussion with those submitting the proposals, the amounts of the recommended awards were adjusted for several grants.

Although the *Guidelines* called for a second review and approval of the grants by a Selection Committee composed of several institutional vice presidents for academic affairs and representatives of the private sector, the large number of proposals and fundable grants precluded employment of this process if recommendations were to reach the Commission for approval by December 2, 1999, as stated in the *Guidelines*. Commission approval needs to be accomplished by the December meeting so that the institutions will know whether to assign release time to grant applicants. Staff also believes that this second review is not necessary given the demarcation made between strong proposals and weaker ones by the readers.

The attached table lists proposals that, based upon the reviewer' recommendations, can be funded within the \$500 thousand appropriated for the South Carolina Instructional Technology Incentive (SCITI) grant program.

The 47 grants that are recommended for funding come from 18 of the 22 institutions submitting proposals. Three grants represent collaborative efforts, one within the University of South Carolina system, one within the technical education system, and one crossing between Clemson University and two technical colleges. Although the majority of the recommended proposals (37) involved the development of traditional courses into technology-based distance courses, seven of the proposals upgrade current distance education courses through technological enhancement or use of a new delivery system. Three of the grants will be used to develop totally new courses using distance education technology.

### **Recommendation**

The Committee on Academic Affairs and Licensing will make its recommendation concerning funding of the attached grants at the Commission meeting.

/jb

**SOUTH CAROLINA INSTRUCTIONAL TECHNOLOGY INCENTIVE GRANTS  
PROPOSALS RECOMMENDED FOR FUNDING  
1999-2000**

	<b>Institution</b>	<b>Project Title</b>	<b>Amount</b>
1	MUSC	Web Delivery of Digitized 3-Dimensional Videos of Cadaver Anatomical Structures	\$12,000
2	USC-Spartanburg	Human Growth and Development	\$9,616
3	USC-Lancaster	Distance Learning Women's Studies 111 in the USC System	\$11,993
4	Florence Darlington Tech	Criminal Justice Online	\$11,500
5	York Tech	ACC 101 On-Line	\$7,000
6	Lander	RN to BSN Completion Program	\$12,000
7	USC-Columbia	Marine Science 111 Offered via Multimedia Presentation and Teleconferencing to High Schools for Advanced Credit	\$12,000
8	Trident Tech	e-Commerce Online Certificate Program	\$10,287
9	Coastal Carolina	Sociology 450, Victimology, Independent Distance Learning	\$7,637
10	Clemson	SC Life Topics for Teachers	\$9,070
11	USC-Columbia	A Collaborative Approach to Designing a Web-based Nursing Research Course	\$25,000
12	USC-Aiken	Transforming APLS 374 Introduction to Public Policy into a Web Course	\$6,595
13	USC-Columbia	Wonderful Pages: Sharing Picture Books with Young Children	\$12,000
14	Clemson	Development of context-specific, Internet based course in Nutrition	\$11,240
15	Piedmont Tech	Development of African American History as an Internet Course	\$5,640
16	Piedmont Tech	Designing Blueprint and G.D.T. Classes for PEN System	\$11,456
17	USC-Spartanburg	SEGL 459 Advanced Rhetoric and Composition	\$9,314
18	Piedmont Tech	Restructuring Spanish I and II as Teleclasses	\$9,921
19	USC-Columbia	Technology Enhancement of the Introductory Psychology Course (PSYC 101)	\$9,086
20	USC-Spartanburg	Environmental Geology of South Carolina	\$9,314
21	Denmark Tech	Design, Development, and Implementation of an Internet Enhanced Early Childhood Education Course (ECD 131) - "Language and Arts"	\$11,058
22	USC-Columbia	Health Care Economics instruction via CD-ROM and the World Wide Web	\$11,957
23	Clemson	Development of Fiber Physics Course in Asynchronous Format	\$9,000
24	MUSC	BHS 478 Senior Practicum: A capstone experience for undergraduate allied health students	\$7,757
25	Tn-County Tech	Veterinary Technology via Distance Education	\$5,940
26	USC-Columbia	Statistics for Quality Improvement	\$11,583
27	Spartanburg Tech	Business Law Video Course (BUS121)	\$11,350
28	USC-Columbia	CLIS 721J (Seminar in School Media Programs)	\$11,984

29	USC-Spartanburg	SHST 323 – Our Past: Upstate History	\$10,114
30	USC-Spartanburg	A Contemporary Literature offered by Contemporary Technology	\$9,314
31	USC-Spartanburg	Introduction to Research in Education	\$11,500
32	Coastal Carolina	EDUCATION 725 Principles of Curriculum Construction	\$12,000
33	Coastal Carolina	Biology of Aging	\$9,000
34	Piedmont Tech	A Proposal for Utilizing Distance Learning Technology in the Teaching of Art History and Appreciation	\$5,327
35	Clemson	HRD 845 (Needs Assessment)	\$10,000
36	USC-Columbia	Enhancing Distance Education for Rural Rehabilitation	\$8,907
37	Central Carolina	NUR 201 Transition Nursing	\$9,000
38	Piedmont Tech	Development of Internet Version of ENG 202	\$6,398
39	College of Charleston	Distance Education CSCI102	\$9,900
40	USC-Aiken	Reading in the Secondary School	\$7,086
41	USC-Columbia	Using CD-ROM Technology to Enhance Instruction in Clinical Phonology	\$11,966
42	USC-Columbia	Telecommunications of The Teacher as Instructional and Professional Leader	\$12,000
43	Clemson	Development of HORT/FOR 309 Arboricultural in Asynchronous Format	\$25,000
44	Coastal Carolina	EDUCATION 706 Human Development and Learning Situations	\$12,000
45	USC-Spartanburg	SGIS 366-Art and Politics	\$9,014
46	Midlands Tech	Delivering Rich Asynchronous Media Assets (DRAMA)	\$20,250
47	USC-Columbia	The Development of a Distance Education Calculus-based Introductory Physics	\$7,926
		Total	\$500,000

**SOUTH CAROLINA INSTRUCTIONAL TECHNOLOGY INCENTIVE GRANTS  
PROPOSALS RECOMMENDED FOR FUNDING**

1999-2000

RANK	UNIVERSITY OF SOUTH CAROLINA	PI	REQ	GRANTED
#1	Studies on High Performance Supercapacitors Based on RuO <sub>2</sub> Carbon Electrodes	zur Loye, H.C.	145,300	103,206
#2	Investigating Novel Heterogeneous Routes for the Synthesis of Pharmaceuticals	Williams, C.	145,000	\$97,209
#3	Improvement of Conjugated Polymers for Electro-Optical Application	Berg, M.A.	154,000	\$121,054
#4	Creation of a Multi-Investigator Polymer and Materials Characterization Center at the University of South Carolina	Bunz, U.H.F.	200,000	\$120,000
#5	Introduction of Personal Software Process and Team Software Process Technologies	Cannon, R.	54,500	\$41,037
#6	Development of Pollution Detection Technology in the Molecular Stable Isotope Facility at USC	Goni, M.A.	150,600	\$98,972
#7	Modeling of Turbid Underflows in Lakes and Oceans	Imran, J.	80,000	\$67,036
#8	Development of Bioindicators of Environmental Mutagens	Krizek, B.	140,000	85,010
#9	On the Analysis and Interpretation of Biological Sequence Data	Hughes, A.L.	170,000	\$90,748
	<b>TOTAL</b>			<b>\$824,272</b>
<b>RANK</b>	<b>CLEMSON UNIVERSITY</b>	<b>PI</b>	<b>REQ</b>	<b>GRANTED</b>
#1	Renewable Resource Derived Biodegradable Fiber and Film Based on Polylactic Acid	Smith, D.	76,036	\$50,000
#2	Metal-Ceramic Nano-Contacts: Towards New Nanocomposites	Carroll, D.	80,000	\$40,000
#3	Next Generation Production Logistics Systems	Ferrell, W.	89,000	\$46,380
#4	T7 System Based, Dendritic Cell Mediated Cancer Immunotherapy	Wei, Y.	150,000	\$71,000
#5	Electrical and Thermal Transport Properties of New and Novel Solid State Systems	Tritt, T.	155,310	\$79,076
#6	The Four-Dimensional Robot Workcell	Hoover, A.	134,500	\$92,801
#7	Advanced Catalytic Materials for Pharmaceutical and Environmental Applications	Bruce, D.	180,000	\$103,320
#8	Mesoscopically Periodic Photonic-Crystal Materials: Tunable Optical Switches	Foulger, S.	148,800	\$98,155
	<b>TOTAL</b>			<b>\$580,732</b>

MEDICAL UNIVERSITY OF SOUTH CAROLINA		PI	REQ	GRANTED
RANK				
#1	Use of DNA Microarray Screening to Evaluate Fetal Heart Abnormalities	Argraves, W.S.	200,000	\$111,977
#2	Generation of Cardiac Muscle Tissue from Adult Human Bone Marrow Stem Cells	Eisenberg, C. A.	127,000	\$96,126
#3	Prevention of Secondary Cataract by Apoptosis Induction	James, E.R.	95,900	\$78,600
#4	A specific Breast Cancer Associated Antigen (BCAA): Isolation of the Gene and Diagnostic Utility	Padlock, G.V.	93,794	\$71,645
#5	Predicting Protein Interactions in Structural Bioinformatics	Vakser, I.A.	143,213	\$73,609
#6	Potential Application of Angiogenic Inhibitors in the Treatment of Retinal Neovascularization	Ma, Jian-xing	185,000	\$85,000
#7	Novel Polyketide Antitumor Drugs by Combinatorial Biosyntheses	Rohr, J.	200,000	\$100,000
#8	Mass Spectrometric Studies of the Shrimp Proteome	Schey, K.L.	199,999	\$122,251
#9	Tissue Engineering and Development of Cardiac Specialized Tissues	Gourde, R.G.	195,600	\$69,788
	<b>TOTAL</b>			<b>\$808,996</b>
<b>TEACHING UNIVERSITIES</b>				
RANK		PI	REQ	GRANTED
#1	Characterization of the Manganese-oxidizing Protein from Leptothrix discophora (College of Charleston)	Riggs-Gelasco, P.J.	55,000	\$55,000
#2	Rational Design of Early Transition Metal Complexes for Catalysis (College of Charleston)	Overby, J.S.	36,900	\$36,900
#3	The Geochemical Cycling and Speciation of Mercury in the Waccamaw River, Horry County, South Carolina, USA (Coastal Carolina University)	Guentzel, J.L.	91,800	\$91,800
#4	Characterization of New Neuroprotective Gene (The Citadel)	Darden, A.G.	64,800	\$62,300
	<b>TOTAL</b>			<b>\$246,000</b>