

**ERIE COUNTY TECHNICAL SCHOOL
PROPOSED AGENDA ITEM**

DATE: October 14, 2009

SUBJECT: Program Revision Approval Request—Tourism & Hospitality Management and Networking Technologies

CATEGORY: Operations

INITIATED BY: Aldo Jackson

DESCRIPTION:

We are asking the operating committee to approve a revision in our senior-only programs from a one-year program model to a two-year program model. Two years ago, a review of PDE guidelines revealed a requirement that one year, senior-only programs must meet for 720 hours. Our senior-only programs meet for 495 hours. At the time we became aware of the discrepancy there was not enough time to revise the curricula and recruit the students. For the 2010-2011 school year, the timing of the curriculum work and student recruitment will line up.

BACKGROUND DOCUMENTS:

Chapter 339-- 22 § 339.22

Tourism & Hospitality Management—Two year Scope & Sequence

Networking Technologies—Two year Scope & Sequence

MOTION:

Motion to approve a revision in the Tourism & Hospitality Management and Networking Technologies programs from a one-year sequence to a two-year sequence for implementation starting with the 2010-2011 academic year.

ECTS QUARTERLY COURSE SEQUENCE

Tourism and Hospitality Management Program

Year I	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
	THM 201 30 Hours Introduction to Hospitality Organization & Service	THM 211 15 Hours Reservations	THM 221 30 Hours Front Office Audit	THM 231 15 Hours Guestroom Cleaning
	THM 202 15 Hours Hotel Safety & Security	THM 212 15 Hours Registration	THM 222 15 Hours Housekeeping Management	THM 232 30 Hours On-Premise Laundry
	THM 203 30 Hours The Guest Cycle	THM 213 30 Hours Check-out and Settlement	THM 223 15 Hours Housekeeping Inventory & Carpet Maintenance	THM 233 30 Hours Careers & Review
	THM 281 45 Hours Back of the House Internship I	THM 251 15 Hours Hotel Design	THM 252 15 Hours The Guest Directory	THM 284 45 Hours Front of the House Internship II
		THM 282 45 Hours Front of the House Internship I	THM 283 45 Hours Back of the House Internship II	PFS220 15 Hours Leadership Management
	TOTAL 120	TOTAL 120	TOTAL 120	TOTAL 135

ECTS QUARTERLY COURSE SEQUENCE Tourism and Hospitality Management Program

Year II	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
	THM 301 15 Hours Leadership & Management	THM 311 15 Hours Marketing & Sales	THM 321 30 Hours The Marketing Plan	THM 331 15 Hours Food Service Industry in the Hotel Industry
	THM 302 30 Hours Communication Skills	THM 312 15 Hours Employee Sales Roles	THM 322 30 Hours Advertising & Public Relations	THM 332 15 Hours Menu Design
	THM 303 15 Hours Team Building	THM 313 15 Hours Telephone Sales	THM 352 15 Hours Marketing Through Brochures	THM 333 15 Hours Beverage Service, CARE, RAMP
	THM 304 15 Hours Career Development	THM 314 15 Hours Meeting Room Sales	THM 383 45 Hours Back of the House Internship IV	THM 334 15 Hours Casual/Theme Restaurants
	THM 381 45 Hours Back of the House Internship III	THM 351 15 Hours Food Safety Management Principles		THM 335 15 Hours Catered Events & Room Service
		THM 382 45 Hours Front of the House Internship III		THM 384 45 Hours Front of the House Internship IV
				PFS320 15 Hours Professional Skills
	TOTAL 120	TOTAL 120	TOTAL 120	TOTAL 135

NETWORKING TECHNOLOGIES COURSE SEQUENCE

	<u>1st Quarter</u> Fundamentals of Networking	<u>2nd Quarter</u> Local Area Networks	<u>3rd Quarter</u> Wide Area Networks	<u>4th Quarter</u> NW Design & Implementation
First Year	NWT351 – 45 hours Networking Basics Principals of Networking Evolution of Networks Networking Careers The Computer System NWT352 – 45 hours Network Architecture and Network Topology Networking Components Types of Networks Network Architecture Network Topologies NWT353 – 30 hours Modes of Transmission How Network Traffic Gets from Here to There Network Models Protocols	NWT361 – 45 hours Network Hardware, Media and Cabling Systems Network Connectivity Devices Network Media Network Interface Cards Wireless Networking NWT362 – 45 hours Network Models and Protocols Common LAN Models Other LAN Models TCP/IP Other Models and Protocols NWT363 – 30 hours Networking Operating Systems and Software Common Operating Systems Graphical User Interface Network OS Software	NWT371 – 30 hours Local Area Networks to Wide Area Networks Communications Data-Encoding Basics Communications Carriers NWT372 – 30 hours WAN and Emerging Technologies How a WAN Works Sending Data Across a WAN Developing Technologies NWT373 – 30 hours The Internet and the Web Structure of the Internet Internet and Web Communities Internet Connections and Addressing Internet and Web Services NWT374 – 30 hours Installing and Upgrading NW Installing Operating Systems Implementation System and NW Upgrades System Testing and Documentation	NWT381 – 30 hours Network Planning and Design Network Design Selecting Hardware Server & Network Performance NWT382 – 30 hours Network Maintenance and Security The Basics of Managing Network Monitoring and Maintenance Basic Scripting Ensuring Network Security NWT384 – 15 hours Troubleshooting Networks Troubleshooting Basics Finding and Repairing Problems Troubleshooting Tools NWT383 – 30 hours The World Wide Web The Internet & the World Wide Web Business and the Web Languages of the Web NWT385 – 15 hours Math for Computer Networking Number conversions Solving algebraic formulas Basic geometry Basic logic statements Powers Percentages and weighted averages
	TOTAL 120 Hours	TOTAL 120 Hours	TOTAL 120 Hours	TOTAL 120 Hours



NETWORKING TECHNOLOGIES COURSE SEQUENCE

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
Second Year	NWT451 – 30 hours Network Review & Specialized Projects Network Types Network Models Network Topologies Applicable Emerging Technologies Post Secondary and Career Exploration Specialized Networking Projects NWT452 – 30 hours Cabling, Connectors and Ethernet Standards Media Considerations Network Media and Connectors IEEE and Networking Standards 802.3 Ethernet Standards NWT453 – 30 hours Networking Components and Devices I How Network Traffic Gets from Hubs, Network Cards MSAU Switches + Advanced Features Bridges, Routers Gateways NWT454 – 30 hours Networking Components and Devices II Wireless Access Points Modems Firewalls DHCP Server Repeaters Specialized Network Devices TOTAL 120 Hours	NWT461 – 45 hours TCP/IP Routing and Addressing Identifying the Differences Between IPv4 Public and Private Networks Assigning IP Addresses NAT, PAT and SNAT Managing TCP/IP Routing NWT462 – 30 hours WAN Technologies and Internet Access ISDN T-Carrier Lines SONET/OCx Levels Frame Relay Asynchronous Transfer Mode xDSL, Cable, Satellite, Wireless, and POTS Internet Access NWT463 – 45 hours Wireless Networking Wireless Access Points Wireless Radio Channels Factors Affecting Wireless Signals 802.11 Wireless Standards Establishing Connection Configuring the Wireless Connection Infrared Wireless Networking Bluetooth TOTAL 120 Hours	NWT471 – 45 hours Network Performance Optimization Risks Fault Tolerance Disaster Recovery NW Optimization Strategies Command-Line Utilities NWT472 – 45 hours Network Securities Firewalls Access Control Overview Tunneling and Encryption Remote-Access Protocols and Services Authentication, Authorization and Accounting (AAA) Remote Authentication Protocols Physical Security Secured vs Unsecured Threats Managing Common Security Threats NWT473 – 30 hours Specialized Projects Post Secondary and Career Exploration Specialized Networking Projects TOTAL 120 Hours	NWT481 – 45 hours Network Management Tools and Documentation Documentation Management Monitoring Network Performance Networking Tools NWT482 – 45 hours Troubleshooting and Supporting the Network Troubleshooting Steps and Procedures Troubleshooting the Network Topology Errors Issue Escalation NWT483 – 30 hours Specialized Projects Senior Project Specialized Networking Projects TOTAL 120 Hours

fulfilling occupational, civic, social and community responsibilities shall be an integral part of this program plan.

(2) *Pennsylvania academic standards.* Pennsylvania academic standards under Chapter 4 (relating to academic standards and assessment) shall be integrated within the technical curriculum and instruction.

(3) *CIP Code.* Programs will be identified by CIP code.

(4) *Planned instruction.* Planned instruction must include the integration of academic, career development and technical curricula at the secondary level.

(5) *Occupational analysis.* The occupational analysis conducted by the school entity under § 339.4(a) (relating to program approval) must lead to clearly stated performance objectives deemed critical to successful employment, and assessment of student competencies based upon performance standards.

(6) *Industry standards.* Programs must prepare students to meet industry-defined standards, certifications, regulations or licensing agreements demonstrated through industry assessment, industry credentials, industry certification, license or State assessment.

(7) *License requirements.* Programs designed to provide students with the background to meet certification and licensure requirements must meet the standards of the licensing agency and be supervised or administered according to the certifying or licensing agency, Parts I and II (relating to State Board of Education; and standards). Information on legal requirements or limitations relating to the occupations for which they are preparing shall be given to all students in writing.

(8) *Extended classroom and work-based learning.* The program must provide students an opportunity to acquire experience in appropriate work situations related to their vocational program of study. When the traditional shop or laboratory cannot simulate the work situation, the classroom may be extended to a cooperating agency or business as long as the educational objectives are being met. Health occupations curriculum preparing individuals for direct patient care must provide clinical experience as an integral part of the curriculum.

(9) Minimum time requirements.

(i) The school entity may develop vocational education programs for any time length as long as they do not go below the minimums listed in this subsection. Vocational programs may range in duration from 1 year to 4 years, and the following represents the minimum total hours required for a program sequence:

(A) One year sequence. A vocational technical education program existing in the 12th grade when students have met their academic graduation requirements but require technical courses only, and lasting 1 year in duration must provide a minimum total of 720 hours of vocational program instruction by the end of the program year.

(B) *Two year sequence.* A vocational technical education program consisting of 2 sequential years must provide a minimum total of 720 hours of vocational program instruction by the end of the program sequence.

(C) *Three year sequence.* A vocational technical education program consisting of 3 sequential years must provide a minimum total of 1,080 hours of vocational program instruction by the end of the program sequence.

(D) *Four year sequence.* A vocational technical education program consisting of 4 sequential years must provide a minimum total of 1,320 hours of vocational program instruction by the end of the program sequence.

(ii) The following requirements shall be considered in planning vocational education programs based on the minimum time requirements listed in subparagraph (i):

(A) Vocational education credits may be given for hours spent in supervised agricultural experience, cooperative clinical experiences and other supervised occupational experience occurring during or after the school day as defined in the Public School Code.

(B) A minimum of two planned courses shall be operated per year. These two planned courses shall be skilled courses.

(C) Sequences shall be offered in consecutive years and the last year of the program will conclude in the twelfth grade.

(D) This section includes the minimum requirements for a program to be eligible for vocational reimbursement. It is recognized that selected vocational programs may require more than the minimum hours to offer an effective education program.

(b) *Exceptional programs requirements.* Exceptional programs could include any of the occupational areas defined in this section. See subsection (a). An exceptional program will be approved to address special needs documented by the school entity. The program content shall be designed in accordance with one of the following standards-based plans:

(1) *Special vocational.* A plan designed to meet the vocational education requirements of special needs students in accordance with a least restrictive environment and their IEPs.

(2) *Experimental.* Special pilot, experimental, exemplary or innovative programs, which do not fit within the structure of any of the plans, may be approved on an annual basis after review by the Secretary.

(c) *Diversified occupations program requirements.* Diversified occupations programs may include any of the occupational areas defined in subsection (a) or other occupational areas not offered at the comprehensive high schools or AVTS. The diversified occupations program shall be available as a 1-year or 2-year program. This program is for 11th and 12th grade students who are unable to gain admission to a vocational program due to excessive numbers of applicants, inabil-