

KENT STATE UNIVERSITY CERTIFICATION OF CURRICULUM PROPOSAL

Preparation Date _____ Curriculum Bulletin _____
Effective Date **Fall 2020** Approved by EPC _____

Department _____
College **AP - Applied and Technical Studies**
Degree **AAS - Associate of Applied Science**
Program Name **Environmental Health and Safety Program** Banner Code **EVHS**
Concentration(s) _____ Concentration(s) Banner Code(s) _____
Proposal **Offer program at another campus or off site**

Description of proposal:

The purpose of this proposal is to extend the Associate of Applied Science in Environmental Health and Safety to the East Liverpool Campus. Currently, the Environmental Health and Safety major is offered and will continue to be offered at the Trumbull Campus.

Does proposed revision change program's total credit hours? Yes No
Current total credit hours: **64** Proposed total credit hours **64**

Describe impact on other programs, policies or procedures (e.g., duplication issues; enrollment and staffing considerations; need; audience; prerequisites; teacher education licensure):
none

Units consulted (other departments, programs or campuses affected by this proposal):
East Liverpool Faculty Council, Trumbull Faculty Council, CATS Curriculum Committee, EPC, Faculty Senate

REQUIRED ENDORSEMENTS

| | |
|---|----------------------------|
| <p><i>David Pater</i> - TRUMBULL CAMPUS</p> | <p><u>9 / 6 / 19</u></p> |
| <p>Department Chair / School Director</p> | |
| <p><i>David M. ...</i> - EAST LIVERPOOL CAMPUS</p> | <p><u>9 / 5 / 19</u></p> |
| <p>Campus Dean (for Regional Campuses proposals)</p> | |
| <p><i>W. ...</i></p> | <p><u>10 / 24 / 19</u></p> |
| <p>College Dean (or designee)</p> | |
| <p> </p> | <p>___/___/___</p> |
| <p>Dean of Graduate Studies (for graduate proposals)</p> | |
| <p> </p> | <p>___/___/___</p> |
| <p>Provost (or designee)</p> | |



Board of Regents

University System of Ohio

Change Request: Offering Existing Program at Regional Campus

Date of submission: February 13, 2019

Name of institution: Kent State University

Name of campus: East Liverpool Campus

Program to be delivered at the site: AAS degree in Environmental Health and Safety

Proposed start date: Fall 2019

Primary institutional contact for this request:

Name: Therese E. Tillett
 Title: Director of Curriculum Services, Office of Provost
 Phone number: 330-672-8558
 E-mail: tillet1@kent.edu

Date that the request received final approval from the appropriate institutional committee:

Final approval by the Educational Policies Council, a sub-committee of the Faculty Senate, on [date]

Educator Preparation Programs:

Program leads to licensure: No
 Program leads to endorsement: No

Briefly describe the rationale for offering the program at this site. In your response, indicate whether the program to be offered at the site will be time limited or ongoing.

The Kent State University Trumbull Campus has offered the Associate of Applied Science in Environmental Health and Safety since 1991; it was known as Environmental Safety Management Technology when first offered. The East Liverpool Campus Dean, in conjunction with the Columbiana County Educational Service Center's Business Advisory Council, seeks to bring more educational opportunities to Columbiana County. Environmental Health and Safety has been identified by businesses and industry in the region as a possible critical workforce development piece. The East Liverpool Campus requests to extend the Trumbull degree program to its campus and to offer this degree on an ongoing basis.

SECTION 1: CHANGES NEEDED TO ACCOMMODATE THE NEW PROGRAM(S)

Academic and Administrative Leadership and Services

1.1 Describe the changes (if any) that will be needed in academic and administrative leadership at the site to accommodate the new program.

There are no anticipated changes needed in academic or administrative leadership to accommodate this new program. East Liverpool is an established regional campus of Kent State University with a Dean/Chief Administrator Officer who reports to the Vice President for System Integration. The campus also has a full range of support personnel who are supervised by an Assistant Dean. These personnel include a Director of Enrollment Management and Student Services, a Business Manager, a Facilities Manager, and an IT Manager. These positions supervise staff in the library, computer technology, learning center, disability services, admissions, registration, financial aid, and advising. A Tenured Faculty Member in Biological Sciences at the East Liverpool Campus will oversee all curricular and academic aspects of the AAS in Environmental Health and Safety Program.

1.2 Describe the changes (if any) that will be needed in the site's existing administrative services (e.g., admissions, financial aid, registrar, etc.) to accommodate the new program. If such services are not available at the site, describe how students in the new program(s) will access such services.

There are no anticipated changes needed in East Liverpool's administrative services to accommodate this new program. It already provides a full range of administrative services including admissions and financial aid.

1.3 Describe the changes (if any) that will be needed in the site's existing academic student services (e.g., advising, tutoring, psycho-social counseling, placement services, etc.) to accommodate the new program. If such services are not available at the site, describe how students in the new program(s) will access such services.

There are no anticipated changes needed in East Liverpool's academic student services to accommodate this new program. It already provides a full range of academic student services including advising, tutoring, disability services, counseling, and the library.

Resources and Facilities**1.4. Describe the changes in resources and facilities (e.g., classrooms, computer labs, laboratories, study areas, social areas, technology, and other learning environments) that will be needed to accommodate the new program and provide a timeline for implementing the changes.**

There are no anticipated required changes in East Liverpool's resources and facilities to accommodate this new program. It already has the necessary classroom and laboratory facilities to provide all components of the curriculum. It already offers much of the curriculum – especially in Biological Sciences and Chemistry – and thus has the necessary supplies and equipment for those courses. It has study areas including quiet study spaces and the Lang Library Loft; tutoring services also take place in the loft. The campus also has social areas including the Slak Shak and multiple computer labs. Courses unique to the Environmental Health and Safety Program may require the purchase of some specialized materials and supplies (such as respirators and personal protective equipment). The campus has the necessary funds to purchase any additional materials.

1.5 Describe any additional library resources (e.g., personnel, space, technology, etc.) that will be needed to accommodate the new program at the site and provide a timeline for implementing the changes.

There are no anticipated requires changes in East Liverpool’s library resources required to implement this new program. The onsite East Liverpool Campus library currently houses 15,000 volumes and reference materials. It also provides study spaces, tutoring spaces, information literacy instruction, and computer facilities. Like all Kent State University library facilities, it also provides access to interlibrary loan, Ohio LINK, and Kent LINK.

1.6. If a full-service library is not available onsite, please indicate how students, faculty, staff in the program will access the resources and services of the main campus library.

Not applicable as there is already a full-service library onsite.

SECTION 2: PROGRAM INFORMATION

2.1 Using the chart below, please list the degree program/general education program that is being added for delivery at the site.

| title of degree/major or program component | full program available on-site | partial program available on-site | comments for chancellor’s staff |
|---|--------------------------------|-----------------------------------|--|
| Associate of Applied Science in Environmental Health and Safety | ✓ | | The program will be an extension of the existing degree program at the Kent State Trumbull Campus. |

2.2 Indicate whether accelerated, hybrid/blended and/or online delivery options are available for the program at the proposed campus and indicate whether this is different from the delivery option used for the approved program at other campuses:

All Environmental Health and Safety courses will be delivered at the East Liverpool Campus through in-person, traditional instruction. Kent Core courses are available in both an in-person and an online format. There will be no difference in delivery format from what is offered at the Trumbull Campus.

SECTION 3: FACULTY

3.1 Complete a faculty matrix for the proposed program at this offsite location. A faculty member must be identified for each course to be taught at the site during the first two years of program delivery. If a faculty member has not yet been identified for a course, indicate that as an “open position” and describe the necessary qualifications in the matrix.

Please note that the courses listed below in the matrix are the Major Requirements in the degree program. Additional University Requirements include Destination Kent State: First Year Experience

Offering Existing Environmental Health and Safety AAS at East Liverpool Campus | Kent State University | 4

and Kent Core Requirements. These University Requirements are already offered on all Kent State University campuses including East Liverpool.

See the 2018-9 University Catalog for the program requirements:

<http://catalog.kent.edu/colleges/re/environmental-health-safety-aas/#programrequirements>

A copy of each full-time faculty member's CV is included as Appendix A.

*Number of courses instructor will teach per year at all campus locations.

| Name of instructor | Rank or title | Degree, Title, Institution, Year | Years teaching/experience | Courses individual will teach in proposed program | Campuses Taught* |
|--------------------|---|---|---------------------------|---|------------------|
| Qunxing Ding | Associate Professor/ Program Coordinator | PhD Molecular Genetics, China Agricultural University, 1994 | 24 years | BSCI 10001 Human Biology BSCI 10110 Biological Diversity BSCI 10120 Biological Foundations EVHS 10004 Toxicology EVHS 20092 Environmental Technology Internship | 6 |
| Farid Fouad | Associate Professor | PhD Chemistry, Northeastern University | 13 years | CHEM 10050 Fundamentals of Chemistry CHEM 10055 Molecules of Life | 8 |
| Open Position | Adjunct faculty | Bachelors required. Masters preferred | 2 + years | EVHS 10001 Environmental Technology I EVHS 10010 Industrial Hygiene I | 2 |
| Open Position | Adjunct faculty | Bachelors required. Masters preferred | 2 + years | EVHS 20001 Environmental Law | 1 |
| Open Position | Adjunct faculty | Bachelors required. Masters preferred | 2 + years | EVHS 20004 Environmental Health and Safety I EVHS 20008 Environmental Health and Safety Administration | 2 |

3.2 Describe future faculty staffing plans for the program at this location. In your response, include a description of the institution's plans, if any, for adding courses and faculty after the initial two years of operation and a description of the plans to add faculty in response to increases in student enrollment.

Upon approval to extend the degree to the East Liverpool Campus, two currently employed Tenured Faculty Members will teach the Biology and Chemistry courses. The Biology Faculty Member will also serve as the Program Coordinator. The campus will also develop a pool of qualified adjunct faculty to teach specialized Environmental Health and Safety courses. Several local professionals in the field have tentatively expressed interest.

After the initial two years of operation, the East Liverpool Campus will review the need for hiring additional full-time faculty members if enrollment warrants. Each academic year, the campus reviews its budget and considers new position requests recommended by the Faculty Council.

SECTION 4: MARKET / WORKFORCE NEED

4.1 Indicate whether the institution performed a needs assessment/market analysis to determine a need for the program at the proposed site. If so, briefly describe the results of those findings.

The campus did not perform a full needs assessment or market analysis. Rather it collected anecdotal evidence from local employers and from the Columbiana County Educational Service Center’s Business Advisory Council, all of which identified Environmental Health and Safety as a possible critical workforce development piece missing in Columbiana County. This evidence is based in part on existing plants and facilities in the region and proposed projects could only increase the need.

4.2 Indicate the projected enrollments for the program at this site over the next three years.

| | 2019-20 | 2020-2021 | 2021-22 |
|----------------------|---------|-----------|---------|
| First-year students | 10 | 15 | 20 |
| Second-year students | | 8 | 15 |

4.3. Indicate whether the institution consulted with advisory groups, business and industry, or other experts when considering moving the program to the proposed site. If so, briefly describe the involvement of these groups in the development of this request.

The East Liverpool Campus Dean met with the Columbiana County Educational Service Center’s Business Advisory Council and with various business and industry leaders in the area. These include John Avdellas, former President of Heritage-Thermal Services (East Liverpool, Ohio); Tammy Williams, Human Resources Administrator at Ergon-West Virginia (Newell, West Virginia); and Mitchell Baisucci, Environmental Health and Safety Manager at Marsh Bellofram (Newell, West Virginia). All of these constituencies identified a need for training and continued education in Environmental Health and Safety.

4.4. Indicate whether any other institution within a 30-mile radius of your campus currently offers the program(s). If so, list the institutions that offer the program(s) within this radius.

There are no other institutions within a 30-mile radius of the East Liverpool Campus currently offering an Associate Degree in Environmental Health and Safety.

APPENDICES

- Appendix Description**
- A Full-Time Faculty Curriculum Vitae

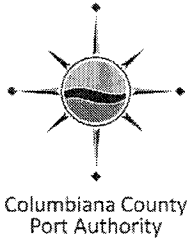
Commitment to Program Delivery at Site

Kent State University is committed to supporting the AAS degree in Environmental Health and Safety at its East Liverpool Campus. If the university decides in the future to either eliminate the degree program or close the campus, Kent State will provide the necessary resources and means for matriculated students to complete their degree.

Kent State University verifies that the information in the application is truthful and accurate.

[will be signed after EPC]

Todd A. Diacon
Provost and Senior Vice President for Academic Affairs
Kent State University



Columbiana County Port Authority

7860 Lincole Place A; Lisbon, Ohio 44432
Phone: 330-424-1800 | Fax: 330-424-4909
Email: ccpa@ccpa-ohioriver.com
Website: www.ccpa-ohioriver.com

November 1, 2019

David M. Dees, Ph.D.
Dean, Kent State University at East Liverpool
400 E. 4th Street
East Liverpool, OH 43920

Dean Dees:

I would like to express my support for Kent State University to expand the Associate of Applied Science in Environmental Health and Safety to the East Liverpool Campus. I am hoping this letter indicates the need for advanced health and safety training opportunities in Columbiana County.

The Associate of Applied Science in Environmental Health and Safety provides students with a working knowledge of the source, nature and scope of conditions that are, or could be hazardous to the environment. Given the ever-expanding manufacturing opportunities in Columbiana County, the knowledge and skills developed from these learning experiences could be applied in several settings and truly expand the workforce opportunities for individuals in our area.

The manufacturing industry in Columbiana County is constantly expanding. Specifically, in the past year Columbiana County has had several multi-million dollar expansions, resulting in the creation of over 100 new jobs. The need for advanced health and safety training opportunities is extreme. With the availability of this program, it will allow for a better prepared workforce to fill the needs of the manufacturers.

As you can see, there are plenty of opportunities for this program to help improve the lives of our citizens. Please let me know if I can provide additional assistance to help facilitate this degree program coming to Kent State East Liverpool.

Sincerely,

A handwritten signature in black ink that reads "Penny J. Traina". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Penny J. Traina, Executive Director

November 4, 2019

David Dees
Dean, Kent State University at East Liverpool
400 E. 4th Street
East Liverpool, OH 43920

Dean Dees:

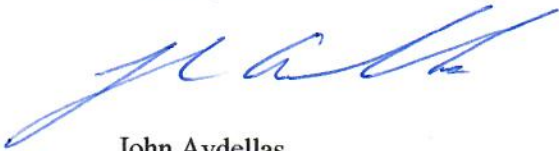
I would like to express my support for Kent State University to expand the Associate of Applied Science in Environmental Health and Safety to the East Liverpool Campus. I am hoping this letter indicates the need for advanced health and safety training opportunities in Columbiana County.

The Associate of Applied Science in Environmental Health and Safety provides students with a working knowledge of the source, nature and scope of conditions that are, or could be hazardous to the environment. We believe this education will not only benefit the student, but also have a positive impact on promoting safety and environmental protection in our local communities. We are consistently seeking technicians to support various departments in order to support our service offerings growth. Although we have our own customized training program for employees, this new initiative will provide students a competitive advantage by understanding the importance of promoting a "live safe" mindset and culture. Safety and environmental health are critical factors in today's national and global economies.

I would like to pledge our support for such a program. We are able to host field experiences, share training modules, evaluate internship programs, and potentially hire graduates. We would also be willing to provide experienced employees to assist with teaching as adjunct instructors.

Please let me know if I can provide additional assistance to help facilitate this degree program coming to Kent State East Liverpool.

Sincerely,



John Avdellas
National Accounts Manager
Ross Environmental Services, Inc.

November 21, 2019

David Dees
Dean, Kent State University at East Liverpool
400 E. 4th Street
East Liverpool, OH 43920

Dean Dees:

I would like to express my support for Kent State University to expand the Associate of Applied Science in Environmental Health and Safety to the East Liverpool Campus.

The Associate of Applied Science in Environmental Health and Safety provides students with a working knowledge of the source, nature and scope of conditions that are, or could be hazardous to the environment. Ergon WV has several employees on staff that utilize the concepts learned in A.A.S. courses. Even though we are currently fully staffed, if a vacancy does come up, we will be happy to consider one of the A.A.S. graduates. The wide range of topics (such as industrial hygiene, environmental technology, environmental issues) in this degree will benefit Ergon since these candidates will have a good foundation in the EHS field.

I would like to pledge our support for such a program. Ergon will consider hosting your graduates as interns once they complete their second year. Also as mentioned above, we will be willing to interview your graduates and offer them positions if they meet the job requirements. If a need for periodic instructional presentations in the topics of EHS at your campus arises, please get in touch with me and we can evaluate if one of our employees can assist for a short period of time. In addition, if you are in need for instructional equipment, Ergon is willing to review your needs and assess whether we can help.

Please let me know if I can provide additional assistance to help facilitate this degree program coming to Kent State East Liverpool.

Sincerely,



Jack Azar
ESHT Manager
Ergon West Virginia, Inc.

Environmental Health and Safety Environmental Scan Kent State University at East Liverpool and Salem

In order to assess the need for an environmental health and safety associate degree at Kent State University at East Liverpool and Salem, an environmental scan of environmental health and safety employment and education was conducted. Environmental health and safety occupation employment is projected to grow in Ohio. The number of environmental health and safety associate degrees awarded grew in Ohio by approximately 248 percent from 2008 to 2016 in Ohio.

The research includes data from the following sources:

- Ohio Board of Regents
- U.S. Bureau of Labor Statistics

Environmental Health and Safety Occupation Employment in Columbiana County Region

According to the U.S. Bureau of Labor and Statistics, the Columbiana County region employs 340 in environmental health and safety occupations. The location quotient indicates a higher employment rate than other areas.

| Occupation (SOC code) | Employment | Location Quotient |
|--|------------|-------------------|
| Occupational Health and Safety Specialist (29-9011) | 290 | 1.40 |
| Occupational Health and Safety Technicians (29-9012) | 50 | 1.21 |

Environmental Health and Safety Employment Projections and Job Openings in Ohio

As shown in the table below, the U.S. Bureau of Labor and Statistics is projecting employment growth.

| Occupation (SOC code) | 2016 | 2026 | Number | Percent | Annual Job Openings (2016-2026) |
|--|-------|-------|--------|---------|---------------------------------|
| Occupational Health and Safety Specialist (29-9011) | 4,039 | 4,259 | 220 | 5.4% | 228 |
| Occupational Health and Safety Technicians (29-9012) | 839 | 883 | 44 | 5.2% | 47 |

Ohio Environmental Health and Safety Degrees

According to the Ohio Board of Regents, Ohio Universities have been awarding degrees as shown in the table below. From 2008 to 2016, the growth of associate degrees awarded was 248 percent.

| Discipline Area | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | % Change 2008 to 2016 |
|---|------|------|------|------|------|------|------|------|------|-----------------------|
| University Main and Regional Campuses - Associate Degree | | | | | | | | | | |
| Environmental Health and Safety | 52 | 39 | 63 | 86 | 145 | 131 | 121 | 126 | 129 | 248% |

Therese –

Please see below for answers to your questions contained in your e-mail of October 31, 2019 regarding the proposed A.A.S degree in Environmental Health and Safety at the East Liverpool Campus.

1. *The proposal states East Liverpool already “offers much of the curriculum,” which makes it sound like it’s a majority. From my review, East Liverpool currently offers only the Kent Core courses in the program – and none of the major courses.*

Not all the EVHS and major courses were listed in the proposal with an instructor. Who will be teaching these courses?

Dr. Qunxing Ding, TT Faculty at East Liverpool, will serve as the Program Coordinator and will teach 5 courses that are required in the program: BSCI 10001 Human Biology; BSCI 10110 Biological Diversity; BSCI 10120 Biological Foundations; EVHS 1004 Toxicology; and EVHS 20092 Environmental Technology Internship. Dr. Farid Fouad, also TT Faculty at East Liverpool, will teach CHEM 10050 Fundamentals of Chemistry and CHEM 10055 Molecules of life.

The remainder of the EVHS courses you listed, EVHS 21010 Industrial Hygiene II, EVHS 22095 Special Topics, EVHS 30002 Environmental Issues II, EVHS 30020 Hazardous Waste Operations/Emergency Response, and EVHS 40006 Fire Prevention and Control are all electives, of which students need to choose 2 courses. We will rotate when these will be offered, and they will be taught by adjuncts who have specialized training in these areas. We have several specialists already identified in our community who are willing to teach.

Both Public Health courses you listed, PH 10001 Introduction to Public Health and PH 30007 Prevention and Control of Diseases, are currently offered on-line throughout the regional system or on-line through the Kent campus.

2. *Requirement GEOG 17063 World Geography has not been offered at East Liverpool, and it’s not mentioned in the proposal. How will students complete that requirement?*

The Salem Campus offers GEOG 17063 World Geography which could be taught via Zoom technology from the Salem Campus to the East Liverpool Campus. The Kent Campus also offers this course online.

3. *The proposal states there was no needs assessment done. Can you provide anything at all – e.g., letters of support, job listings, Ohio Jobs data – that can supporting the viability of this program at East Liverpool and the projected enrollment? Why did the Business Advisory Council of the Columbia County Educational Services Center choose this program over other programs?*

Attached please find three letters of support from John Avdellas, National Accounts Manager Ross Environmental Services Inc., Penny J. Traina, Executive Director of the Columbiana County Port Authority, and Jack Azar, EHST Ergon West Virginia. Two letters, Traina and Avdellas express the need for advanced health and safety training in Columbiana County. Ms. Traina

references the growing manufacturing industry in the county, while Mr. Avdellas would be willing to support us by providing adjuncts, sponsoring internships, and potentially hiring our graduates. Mr. Azar's letter addresses how the subject matter in the curriculum is relevant to the field and that his company would be interested in hosting internships, and, when possible, providing employment opportunities.

The counties in Pennsylvania and West Virginia that border the Kent State East Liverpool Campus are projecting an increase in manufacturing and industrial jobs related to the Associate of Applied Science in Environmental Health and Safety. According to labor market data, Beaver, Washington, and Green counties in Pennsylvania are projecting the most significant increase in manufacturing related jobs, due to the construction of the Shell Polymers ethylene cracker plant in Beaver County. Employment opportunities in chemical, plastics, and rubber manufacturing are expected to increase between 5% and 7.8%. These jobs will be located within a 30 to 40-minute drive from the city of East Liverpool.

Additionally, manufacturing and industrial sites in the northern panhandle of West Virginia are projecting a job market increase of approximately 1.5% according to lmi.workforcewv.org. Hancock County, West Virginia is directly across the Ohio River from Kent State East Liverpool and is already home to several area facilities that could possibly employ graduates of this program.

Marshall Hill, Outreach Program Coordinator/Research at the Kent State Stark Campus conducted an environmental scan of environmental health and safety employment and education. Using data from both the Ohio Department of Higher Education and the U.S. Bureau of Labor Statistics, he found that the outlook for such a program in Columbiana County is promising.

Specifically, the Columbiana County region currently employs 340 persons in environmental health and safety occupations. The location quotient indicates a higher employment rate than in other areas (Table 1), and employment openings in this area in the next 10 years is projected to grow. (Table 2)

Table 1

| Occupation (SOC code) | Employment | Location Quotient |
|--|------------|-------------------|
| Occupational Health and Safety Specialist (29-9011) | 290 | 1.40 |
| Occupational Health and Safety Technicians (29-9012) | 50 | 1.21 |

Table 2

| Occupation (SOC code) | 2016 | 2026 | Number | Percent | Annual Job Openings (2016-2026) |
|--|-------|-------|--------|---------|---------------------------------|
| Occupational Health and Safety Specialist (29-9011) | 4,039 | 4,259 | 220 | 5.4% | 228 |
| Occupational Health and Safety Technicians (29-9012) | 839 | 883 | 44 | 5.2% | 47 |

Other universities have capitalized upon this trend, as there has been a 248% growth rate in associate degrees awarded in Environmental Health and Safety since 2008. (Table 3)

Table 3

| Discipline Area | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | % Change 2008 to 2016 |
|---|------|------|------|------|------|------|------|------|------|-----------------------|
| University Main and Regional Campuses - Associate Degree | | | | | | | | | | |
| Environmental Health and Safety | 52 | 39 | 63 | 86 | 145 | 131 | 121 | 126 | 129 | 248% |

4. *The proposal states there will be no anticipated changes with this new offering. However, you plan on hiring adjuncts, which I assume is an additional cost, and Qunxing Ding will now be teaching EVHS courses and serving as a program coordinator. So, who will be covering his current course load?*

Dr. Ding will be teaching the Biology components of the degree. These courses, with the exception of EVHS 10004 and EVHS 20092, are currently offered at the East Liverpool Campus. This should not impact his load until such time as the program grows large enough to warrant extra sections. Adjuncts will be hired to teach the specialized EVHS courses. However, as their pay is much less, we are anticipating having enough students enrolled to cover the cost of the instructor.

I hope that your questions have been satisfactorily answered. If not, or if you need further information, please feel free to contact me.