



JOY HOFMEISTER
STATE SUPERINTENDENT *of* PUBLIC INSTRUCTION
OKLAHOMA STATE DEPARTMENT *of* EDUCATION

MEMORANDUM

TO: The Honorable Members of the State Board of Education

FROM: Joy Hofmeister

DATE: February 27, 2020

SUBJECT: Pioneer Technology Center Requesting Approval of Focused Field of Study in Biomedical Sciences

The State Department of Education is recommending approval of the Pioneer Technology Center Focused Field of Study in Biomedical Sciences.

“Technology centers may offer programs designed in cooperation with institutions of higher education which have an emphasis on a focused field of career study upon approval of the State Board of Education and the independent district board of education. Students in the tenth grade may be allowed to attend these programs for up to one-half (1/2) of a school day and a credit for the units or sets of competencies required in paragraphs 2 and 3 of subsection B of this section shall be given if the courses are taught by a teacher certified in the secondary subject area.”
70 O.S § 11-103.6

Based on Title 70 §11-103.6(G)(1), the State Board of Education shall “*ensure that rigor is maintained in the content, teaching methodology, level of expectations for student achievement, and application of learning in all the courses taught to meet the graduation requirements.*” The submitted application for Pioneer Technology Center was reviewed based on three primary considerations to address this mandate:

1. the extent to which the course addresses the **necessary and appropriate content**
 - a. Evidence Reviewed: Alignment Study of Course Materials and Competencies to Oklahoma Academic State Standards
2. the extent to which the instructor is certified to provide **rigorous instruction** and ensures a **high level of expectations for students**
 - a. Evidence Reviewed: Course Description, Course Syllabus and Identification of Properly Certified Instructor

1. the extent to which there is **application of learning**
 - a. Evidence Reviewed: Joint Program Agreements

For courses that provided all necessary documentation, each component was reviewed based on the submitted materials and has been rated as demonstrating either Insufficient Evidence or Sufficient Evidence. Where possible and appropriate, recommendations are provided to increase supporting evidence. Otherwise, an account of the provided evidence is summarized.

The attached reports indicate that the application has **Sufficient Evidence** across all three considerations. It is, therefore, our recommendation that **this Field of Study should be approved.**

The Oklahoma State Department of Education is thankful for the time and dedication of the applicant and especially to the guidance and support offered by Tonja Norwood of the Oklahoma State Department of Career Technology.

Attachment: Summary of Findings

Review of Pioneer Technology Center's Focus Field of Study Application

Date: February 27, 2020

Reviewed By: Christine Koerner, Director of Secondary Mathematics Education, and Tiffany Neill, Executive Director of Curriculum and Instruction

Summary of Findings

The reviewed courses listed below were identified in the Application for a Focused Field of Career Study in Biomedical Sciences as required or available to students at the Pioneer Technology Center. Only those courses traditionally taught in an Oklahoma public-school setting were reviewed.

The application has provided sufficient evidence to satisfy all considerations and is approved to provide the mathematics and science content required by the identified Focus Field of Study to sophomores, juniors, and seniors of the cooperating partner schools. In particular, the following courses are approved: Anatomy and Physiology, Human Body Systems, Principles of Biomedical Science, Medical Interventions, Algebra II, and Geometry.

The table below represents a summary of the review process for Pioneer Technology Center's Focused Field of Study. Each course submitted to the Oklahoma State Department of Education is listed, along with a summary of each course review. Justification of each rating can be found on pages two and three of this document.

Course Identified in Field of Study	Oklahoma Academic Standards Assurance	Syllabus	Result
Anatomy and Physiology	Sufficient	Sufficient	Sufficient
Human Body Systems	N/A	N/A	This is a PLTW course and is not required to be reviewed by OSDE
Principles of Biomedical Science	N/A	N/A	This is a PLTW course and is not required to be reviewed by OSDE
Medical Interventions	N/A	N/A	This is a PLTW course and is not required to be reviewed by OSDE
Algebra II	Sufficient	Sufficient	Sufficient
Geometry	Sufficient	Sufficient	Sufficient

Process

Based on Title 70 §11-103.6.G.1, the State Board of Education shall “ensure that rigor is maintained in the content, teaching methodology, level of expectations for student achievement, and application of learning in all the courses taught to meet the graduation requirements.” The submitted application for Metro Technology Center was reviewed based on three primary considerations to address this mandate:

- 1) the extent to which the course addresses the **necessary and appropriate content**
 - a) Evidence Reviewed: Oklahoma Academic Standards Assurance and related documentation
- 2) the extent to which the instructor is certified to provide **rigorous instruction** and ensures a **high level of expectations** for students
 - a) Evidence Reviewed: Course Description, Syllabus, and Identification of Certified Instructor
- 3) the extent to which there is **application of learning**
 - a) Evidence Reviewed: Joint Program Agreements

For courses that provided all necessary documentation, each component was reviewed based on the submitted materials and has been rated as demonstrating either *Insufficient Evidence* or *Sufficient Evidence*. Where appropriate, recommendations are provided to increase supporting evidence. Further, possible revisions are provided to indicate that they are not required but may be useful in increasing supporting evidence.

Review of Pioneer Technology Center Field of Study

Anatomy and Physiology

- **Consideration 1 - Necessary and Appropriate Content:** The Oklahoma Academic Standards Assurance provides Sufficient Evidence regarding the coverage of necessary and appropriate content found in the new Oklahoma Academic Standards for Science.
- **Consideration 2 - Rigorous Instruction and High Level of Expectations:** The Anatomy and Physiology course description, syllabus, and teacher certification provides Sufficient Evidence regarding the expectation of rigorous instruction and ensures a high level of expectations for students. The proposed instructor for Anatomy and Physiology is certified appropriately in the state of Oklahoma.

Human Body Systems

- Project Lead the Way (PLTW) courses are not required to be reviewed by the Oklahoma State Department of Education for approval.

Principles of Biomedical Science

- Project Lead the Way (PLTW) courses are not required to be reviewed by the Oklahoma State Department of Education for approval.

Medical Interventions

- Project Lead the Way (PLTW) courses are not required to be reviewed by the Oklahoma State Department of Education for approval.

Algebra II

- **Consideration 1- Necessary and Appropriate Content:** The Oklahoma Academic Standards Assurance provides Sufficient Evidence regarding the coverage of necessary and appropriate content found in the Oklahoma Academic Standards for Mathematics.
- **Consideration 2- Rigorous Instruction and High Level of Expectations:** The Algebra II course description, syllabus, and teacher certification provides Sufficient Evidence regarding the expectation of rigorous instruction and ensures a high level of expectations for students. The proposed instructor for Algebra II is certified appropriately in the state of Oklahoma.
- **Possible Revisions for Algebra II:** Consider revising the course objectives on the syllabus using the language of the Oklahoma Academic Standards for Algebra II.

Geometry

- **Consideration 1- Necessary and Appropriate Content:** The Oklahoma Academic Standards Assurance provides Sufficient Evidence regarding the coverage of necessary and appropriate content found in the Oklahoma Academic Standards for Mathematics.
- **Consideration 2- Rigorous Instruction and High Level of Expectations:** The Geometry course description, syllabus, and teacher certification provides Sufficient Evidence regarding the expectation of rigorous instruction and ensures a high level of expectations for students.
- **Possible Revisions for Geometry:** Consider revising the course objectives on the syllabus using the language of the Oklahoma Academic Standards for Geometry.

Consideration 3: Application of Learning

- **Findings for Pioneer Technology Center:** The copies of the Joint Program Agreements provide Sufficient Evidence regarding the expectation of application of learning.