

# *ITEDU 564 Practicum in Technology Education for the Elementary Grades*

## Course Syllabus

**I. Course title:** Practicum in Technology Education for the Elementary Grades (3 credits)

**II. Prerequisites:** None

**III. Catalog Description:**

A study and field practice of the philosophy, psychology and objectives of integrating technology education in the elementary and special education classes. Students develop and integrate technology-based curricula in the classroom. Strategies related to classroom organization, physical planning, tool and material acquisition are discussed and implemented. Ten to twenty hours spent in contact with children.

**IV. Laboratory Experiences and Hours:**

Laboratory experiences are confined to basic tool instruction and student preparation of materials for subsequent use in the elementary and special education classrooms. The laboratory is staffed by instructors and graduate assistants for a minimum of 20 hours each week. Students spend time learning skills necessary to teach the techniques they will be employing in the classroom. As part of the requirements of a practicum, the participants utilize the principles researched and discussed in class with their own classroom or in another approved classroom.

**V. Course Rationale:**

Technology education is both a subject and a method. As a method it can be used to make concepts which are normally included in the elementary school curriculum more concrete and more meaningful. As a subject, technology education is a study of the productive activities of mankind, including manufacturing, construction, communication, transportation, and energy. It is imperative in today's technology-based society that all students become technologically literate. An understanding of technology and its impacts should begin as soon as students begin attending school, or at least by the first grade and it should be integrated into all subject matter of the elementary school. It is anticipated that the average elementary student today may experience a rate of change that is 500 times greater than today's adults have faced in their lifetime. Given that fact, they must understand technology and technological change.

This course is taught as a practicum because many of the students will have taken undergraduate courses in technology education and related subject areas or will already be working with elementary school students. The purpose of this course is to have the students apply principles of technology education with elementary school students under the supervision of a college technology educator. The major thrust of this class is the involvement of the participant in an elementary classroom integrating technology education activities. Students will also become familiar with and use the literature and research in integrating technology education for the elementary grades and with special needs students.

## **VI. Course Objectives:**

1. To understand how technology education enriches subject matter of the elementary school.
2. To understand how technology education enhances the educational and developmental growth of the special education student.
3. To become more technologically literate.
4. To develop necessary skills and attitudes for planning, developing, constructing and evaluating technology activities for the elementary and special needs students.
5. To become familiar with the research and literature of technology education in the elementary grades and with special needs students.

## **VII. Course Content:**

An overview of the philosophy and methodology of elementary school technology education and of integrating constructive activities into the classroom curriculum. Students are assigned readings in research and practice of technology education from materials listed in the references section of this syllabus. There are two paths available in this course, depending upon the nature of the student. Those who are unfamiliar with technology education (elementary and special education majors) are introduced to experiences with technology education tools, materials, and process. Technology educators are introduced to the elementary school curriculum. A survey of activities which have been successful in the elementary schools and with special needs students is presented. Following such basic instruction, students develop their own units; and, with approval of the instructor, teach them to students in preschool, elementary, or special education classrooms.

### **VIII. Course Format:**

This course is a practicum. Once basic instruction has been completed, students apply that knowledge and the knowledge they bring to class in a practical setting. The setting is usually the public school. Students are expected to utilize a classroom in which they are now teaching or, with the help of the instructor and Ball State resources, to find a classroom which will allow them to work out a unit of technology education instruction.

### **IX. Methods of Student Evaluation:**

Students are evaluated subjectively, with criteria related to their entering level of expertise in both tool use and teaching methodology. Students are expected to complete a unit of instruction with school children within the time limits of the semester. Students write a summary report and produce a presentation of the activity that also is evaluated.

### **X. Methods of Course Evaluation:**

Each class is evaluated using the University Evaluation and Examination Services Faculty Course Evaluation adopted by the Department of Industry and Technology, the College of Applied Science and Technology and Ball State University.

### **XI. Laboratory Use:**

A schedule of open laboratory hours is posted at all times on the door to the laboratory. During open lab times, students have access to all tools and materials.

### **XII. Attendance/Assignment/Test Policy:**

Attendance at scheduled classes is mandatory, missing one class will affect the student's final grade. All assignments must be completed. No exceptions. There is no major test.

### **XIII. Audit Policy:**

Faculty and graduate students may audit the the class. Since the course is a hands-on practicum, any auditor would be required to participate fully in all class activities, including the development of a unit of study and the application of the same in a school setting.

### **XIV. Special Student Needs:**

If you need course adaptations or accommodations because of a

disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. My office is located in AT210 and my office hours are 9am to Noon and 2-5:30pm. I can be contacted at 765-285-5647 or at home at 282-0793.

**XV. Program(s) in Which the Course is Required:**

Special Education

**XVI. References/Bibliography:**

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Gerbracht, C. & Babcock, R. (1969). *Elementary School Industrial Arts.* New York: Bruce Publishing Co. 1969

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Heiner, C. & Hendrix, W. (1980). *People Create Technology.* Worcester, MA: Davis Pub. Inc.

Hutchinson, J. & Karsnitz, J. (1994). *Design and Problem Solving in Technology.* Albany, NY: Delmar.

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Teacher. 53:1, pp. 7-11.

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