## Ohio Articulation Number (OAN) Course Submission Form 2005-2006

**College/University**  The University of Akron  

**Course(s) Submitted**
- 5500:311 Instructional Resources
- **Ohio Articulation Number**
- OED 002

**Technology**

**Date**  10/04/05

**Name and title of individual submitting on behalf of the college/university**
- **Name**  Dr. Karen Herrington  
- **Title**  Director of Assessment & Accreditation

**Address**
- College of Education  
- Zook Hall 210  
- Akron, OH 44325-4201

**E-mail**  kherrington@uakron.edu

**Phone**  330.972.6661

**Fax**  330.972.5636

**Credit Hours**  3  
**Lecture Hours**  3  
**Laboratory Hours**  (if applicable)
**Pre-Requisites(s)**  (if applicable)
**Course work**  (if applicable)
**5100:210 Characteristics of Learners, 5100:211 Teaching & Learning Strategies**

**Placement Score (if applicable)**
- **(Name of test)**
- **(Domain)  (Score)**

**Catalog/Course Description (Includes Course Title and Course #)**
5500:311 Instructional Resources
Examine existing and developing media, technological, human and environmental resources as they relate to learning. Includes identifying, locating, evaluating, using, designing and preparing educational resources.

Texts/Outside Readings/Ancillary Materials

REQUIRED TEXT

Additional resources and reading for the course will be provided:
On-line at the shared course website: http://www2.uakron.edu/___________ (TBD)
On-line at the WebCT site for this course section http://webct.uakron.edu

Course Objectives and/or Plan of Work

Unit I: Basic Technology Competencies – (INTASC/Ohio: D,E,F,G,H) Students will develop basic technology competencies through effective use of multiple operating systems in this unit. This set of knowledge and skills is the first of two sets of foundations for the rest of the semester’s activities. Upon successful completion of this unit, students will be able to:
  o Demonstrate understanding the basic components of an information system
  o Describe the essential components of multiple operating systems including hardware, (by device and type), application software and networking technologies
  o Identify the link between the information system processing model and operating systems
  o Perform basic hardware and software troubleshooting
  o Understand and use appropriate computer terminology

Unit II: Professional Productivity Applications – (INTASC/Ohio: D,E,F,G,H,I) Students will develop the basic understanding of productivity and utility software capabilities and be able to use a variety of applications. This set of knowledge and skills is the second of two sets of foundations for the rest of the semester’s activities. Upon successful completion of this unit, students will be able to:
  o Describe and use computer software productivity and utility application programs.
  o Demonstrate the ability to create electronic developmentally appropriate teaching materials in a chosen content area.
  o Demonstrate the ability to use technology for sharing electronic resources and communication through the use of networks.
  o Demonstrate the ability to perform the installation and utilize functionality of selected productivity and utility software applications to produce simple instructional materials using, including:
    ▪ Set up, send and receive client/server and Internet-based email messages with attachments.
    ▪ The basic functionality and features of word processing software.
    ▪ Understanding the history and current state of the Internet and use of the World Wide Web as a classroom resource and research tool.
    ▪ The basic functionality and features of linear presentation technologies including PowerPoint, Web pages and Web sites.
    ▪ The basic functionality and features of electronic grade book and/or spreadsheet (Excel) software.
    ▪ The features and functionality in using file compression utilities.
The advantages, features and functionality of creating and disseminating files in a portable document format (PDF).

**Unit III: Teaching with Technology** (INTASC/Ohio: D,E,F,G,H,I) - This unit focuses on the students’ understanding of using existing and emergent educational technologies in achieving curricular goals including, classroom management, curriculum design and instructional strategies. Copyright law, use of copyrighted materials, software licensing and other ethical issues will be explored and discussed. Upon successful completion of this unit, students will be able to:

- Understand and apply all stages in the instructional design process for educational technology planning.
- Evaluate the strengths and weaknesses of existing and emergent educational technologies in classroom integration.
- Successfully evaluate, select and incorporate media in designing instruction.
- Use of national (ISTE) and state (Ohio SchoolNet) standards in evaluating software for classroom use.
- Recognize, understand and incorporate the importance and relevance of copyright law and other ethical issues in using technology resources and materials in the classroom for the purposes of teaching.
- Demonstrate the ability to use technology to locate, evaluate and collect information from a variety of sources (Information literacy).

**Unit IV: Media Production** - (INTASC/Ohio: D,F,G,H,I) The ability to align curricular goals, instructional objectives and the capabilities of electronic media is the intended outcome of this unit. Focus will be placed on principles of effective visual design, specification of clear instructional objectives and the production of electronic media in various digital and non-digital formats. Upon successful completion of this unit, students will be able to:

- Demonstrate competencies in operating, troubleshooting and basic maintenance of instructional technology equipment.
- Identify and incorporate several elements and principles of effective visual design in multiple assignments, including:
  - Scanning, manipulating and reproducing digital images
  - Use of software for the desktop publishing of instructional products such as a brochure, newsletter or poster
  - Creation of digital audio and video
  - Creation of an electronically-generated overhead transparency
  - Modeling and creation of a traditional Web quest (six-part)
- Demonstrate effective presentation capabilities of using instructional technology equipment and completed visual design media to peers in class.

### Description of Assessment and/or Evaluation of Student Learning

<table>
<thead>
<tr>
<th>Assessment Formative/ Criterion</th>
<th>INTASC Principles Addressed</th>
<th>INTASC Principles Assessed</th>
<th>Praxis II Standards</th>
<th>% of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>File manipulation tasks (open/close/save/transfer/rename)</td>
<td>Criterion</td>
<td>D,E,F,G,H</td>
<td>D,E,H</td>
<td>I.A.1, I.A.2, II.A.1,II.B.1</td>
</tr>
<tr>
<td>Information literacy standards</td>
<td>Criterion</td>
<td>D,E,F,G,H</td>
<td>D,E,H</td>
<td>I.A.1, I.A.2,</td>
</tr>
<tr>
<td><strong>Unit II: Professional Productivity Applications</strong></td>
<td><strong>II.B.1</strong></td>
<td>25%</td>
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<td>-----------------------------------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Send and receive email and attachments (repeated)</td>
<td>Criterion</td>
<td>D,E,F,G,H,I D,E,F,G,H,I</td>
<td>I.A.1, I.A.2</td>
<td></td>
</tr>
<tr>
<td>Compose Microsoft Word document (repeated)</td>
<td>Criterion</td>
<td>D,E,F,G,H,I D,E,F,G,H,I</td>
<td>I.A.1, I.A.2, II.A.1,II.B.1</td>
<td></td>
</tr>
<tr>
<td>Research/evaluate Internet &amp; Web resources (repeated)</td>
<td>Criterion</td>
<td>D,E,F,G,H,I D,E,F,G,H,I</td>
<td>I.A.1, I.C.4</td>
<td></td>
</tr>
<tr>
<td>Create Microsoft PowerPoint show (repeated)</td>
<td>Criterion</td>
<td>D,E,F,G,H,I D,E,F,G,H,I</td>
<td>I.A.1, I.A.2, II.A.1,II.B.1</td>
<td></td>
</tr>
<tr>
<td>Create a Gradebook - spreadsheet with Microsoft Excel</td>
<td>Criterion</td>
<td>D,E,F,G,H,I D,E,F,G,H,I</td>
<td>I.A.1, I.A.2</td>
<td></td>
</tr>
<tr>
<td>Utilize compression Utilities (WinZip, PK Zip, etc.)</td>
<td>Criterion</td>
<td>D,F D,F</td>
<td>I.A.1, I.A.2,</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Unit III: Teaching with Technology Ed Tech Strategies</strong></th>
<th><strong>II.B.1</strong></th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Design (Praxis Lesson)</td>
<td>Criterion</td>
<td>D,E,F,G D,E,F,G</td>
</tr>
<tr>
<td>Integration Strategies (documentation/plan)</td>
<td>Criterion</td>
<td>D,E,F,G D,E,F,G</td>
</tr>
<tr>
<td>Media Selection (documentation/plan)</td>
<td>Criterion</td>
<td>D,E,F,G D,E,F,G</td>
</tr>
<tr>
<td>Software Evaluation (assignment)</td>
<td>Criterion</td>
<td>D,E,F,G D,E,F,G</td>
</tr>
<tr>
<td>Electronic Research and Bibliography (webquest assignment)</td>
<td>Criterion</td>
<td>D,E,F,G D,E,F,G</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Unit IV Media Production</strong></th>
<th><strong>II.B.1</strong></th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create/manipulate digital images</td>
<td>Criterion</td>
<td>D,F,G D,F,G</td>
</tr>
<tr>
<td>Create a product using desktop publishing</td>
<td>Criterion</td>
<td>D,F,G D,F,G</td>
</tr>
<tr>
<td>Create/capture/manipulate digital audio and video</td>
<td>Criterion</td>
<td>D,F,G D,F,G</td>
</tr>
<tr>
<td>Create overhead transparencies</td>
<td>Criterion</td>
<td>D,F,G D,F,G</td>
</tr>
<tr>
<td>Create a WebQuest (diversity topic)</td>
<td>Criterion</td>
<td>C,D,E,F,G, H C,D,E,F,G, H</td>
</tr>
</tbody>
</table>

| **Final exam** | Criterion | D,E,F,G,H,I D,E,F,G,H,I | 10% |

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Master Syllabi and Working Syllabi (if both are used)

**The University of Akron**
College of Education
Department of Curricular & Instructional Studies

**INSTRUCTIONAL RESOURCES**

5500:311
3 Credit Hours
I. COURSE DESCRIPTION
Instructional Resources is a required course for all pre-service teachers. It encompasses effectively identifying, locating, evaluating, designing, preparing and efficiently using educational technology as instructional resources in the classroom as related to principles of learning and teaching. Students will develop increased classroom communication abilities through lectures, discussions, modeling, laboratory experiences and completion of a comprehensive project.

II. RATIONALE
Technology has become a significant component of education. In preparing future educators, it is important that they have knowledge of instructional resources; the ability to use instructional resources appropriately; and the capability to make decisions about the selection of instructional resources as it relates to the principles of learning. The foundation of classroom instruction is communication. In order to promote effective communication, the development and integration of educational technology into the curriculum is of vital importance. Students will have multiple opportunities to practice the development and integration of instructional resources through a variety of activities including lecture/discussion, modeling, demonstration, laboratory experiences, and student collaborative projects. The skills learned in this course will be applied in other courses in the Teacher Education program as students are required to produce materials related to their area of study.

III. COURSE GOALS/OBJECTIVES

Unit I: Basic Technology Competencies - (INTASC/Ohio: D,E,F,G,H) Students will develop basic technology competencies through effective use of multiple operating systems in this unit. This set of knowledge and skills is the first of two sets of foundations for the rest of the semester’s activities. Upon successful completion of this unit, students will be able to:
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    - Creation of an electronically-generated overhead transparency
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**Final Project** - The final project will be an entirely electronic presentation that demonstrates students’ abilities to integrate several forms of technology in the classroom. It will contain artifacts from the duration of the semester, all archived to CD ROM. The lesson plan will be in the chosen theme (grade, subject and topic) of each student and may include:
  - Digital media (i.e. - scans)
  - Desktop publishing products (i.e. - brochures, newsletters, posters, transparencies)
  - Digital audio and/or video
  - WebQuests
### IV. COURSE OUTLINE

#### Course Assignments:

<table>
<thead>
<tr>
<th>Unit I: Basic Technology Competencies-Operating Sys.</th>
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<td>D,E,H</td>
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<td></td>
<td>10%</td>
</tr>
<tr>
<td>Information literacy standards</td>
<td>Criterion D,E,F,G,H</td>
<td>D,E,H</td>
<td>I.A.1, I.A.2, II.B.1</td>
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<td>I.A.1, I.A.2</td>
<td></td>
<td>25%</td>
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<tr>
<td>Compose Microsoft Word document (repeated)</td>
<td>Criterion D,E,F,G,H,I</td>
<td>D,E,F,G,H,I</td>
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<tr>
<td>Utilize compression Utilities (WinZip, PK Zip, etc.)</td>
<td>Criterion D,F</td>
<td>D,F</td>
<td>I.A.1, I.A.2,</td>
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<td>Instructional Design (Praxis Lesson)</td>
<td>Criterion D,E,F,G</td>
<td>D,E,F,G</td>
<td>I.A.1, I.A.2, II.A.1,II.B.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration Strategies (documentation/plan)</td>
<td>Criterion D,E,F,G</td>
<td>D,E,F,G</td>
<td>II.A.1,II.A.2, I/A.3,IV.b.1,I V.B.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Selection (documentation/plan)</td>
<td>Criterion D,E,F,G</td>
<td>D,E,F,G</td>
<td>I.A.1, I.A.2, I.A.1. I.A.2,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software Evaluation (assignment)</td>
<td>Criterion D,E,F,G</td>
<td>D,E,F,G</td>
<td>I.A.1, I.A.2,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic Research and Bibliography (webquest assignment)</td>
<td>Criterion D,E,F,G</td>
<td>D,E,F,G</td>
<td>I.A.1, I.A.2, II.A.1,II.B.1</td>
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<thead>
<tr>
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<th>INTASC Principles Assessed</th>
<th>Praxis II Standards</th>
<th>% of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create/manipulate digital images</td>
<td>Criterion D,F,G</td>
<td>D,F,G</td>
<td>I.A.1, I.A.2,</td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td>Create a product using desktop publishing</td>
<td>Criterion D,F,G</td>
<td>D,F,G</td>
<td>I.A.1, I.A.2,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create/capture/manipulate digital audio and video</td>
<td>Criterion D,F,G</td>
<td>D,F,G</td>
<td>I.A.1, I.A.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create overhead transparencies</td>
<td>Criterion D,F,G</td>
<td>D,F,G</td>
<td>I.A.1, I.A.2,</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
V. REQUIRED TEXT


Additional resources and reading for the course will be provided:
On-line at the shared course website: http://www2.uakron.edu/___________ (TBD)
On-line at the WebCT site for this course section http://webct.uakron.edu

VI. INSTRUCTIONAL STRATEGIES/ACTIVITIES/TECHNOLOGY

Instructional is taught almost exclusively in a computer lab so that students will have multiple opportunities each class to become comfortable with the computer technology and work on assignments. However, not all assignments can be completed during class time so students should expect to spend some of their class preparation time in the lab.

VII. EVALUATION/STUDENT ASSESSMENT

All assignments are graded according to criteria clearly stated in the scoring rubric provided with each assignment. Scores on course projects and the final exam determine the final grade. Based on total points earned, final grades will be assigned as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93 - 100%</td>
</tr>
<tr>
<td>A-</td>
<td>90 - 92%</td>
</tr>
<tr>
<td>B+</td>
<td>87 - 89%</td>
</tr>
<tr>
<td>B</td>
<td>83 - 86%</td>
</tr>
<tr>
<td>B-</td>
<td>80 - 82%</td>
</tr>
<tr>
<td>C+</td>
<td>77 - 79%</td>
</tr>
<tr>
<td>C</td>
<td>73 - 76%</td>
</tr>
<tr>
<td>C-</td>
<td>70 - 72%</td>
</tr>
<tr>
<td>D+</td>
<td>67 - 69%</td>
</tr>
<tr>
<td>D</td>
<td>63 - 66%</td>
</tr>
<tr>
<td>D-</td>
<td>60 - 62%</td>
</tr>
<tr>
<td>F</td>
<td>Below 60%</td>
</tr>
</tbody>
</table>

Assigned projects are to be submitted to the instructor by the due date assigned to that project. If a student is unable to meet the assigned deadline due to unforeseen circumstances, they are encouraged to talk with his or her instructor. Note: Before being permitted to advance to the next Education Core phase, the student must receive a grade of C or better in the core courses.

VIII. STUDENT ETHICS AND OTHER POLICY INFORMATION

For further information about The University of Akron’s policies regarding student ethics and conduct, please consult the following sources: http://www3.uakron.edu/gradsch/gradbull.html, then select “General Information” (academic honesty); or www.uakron.edu/studdev/conduct.html (Student Code of Conduct). Any student who feels she/he may need an accommodation based on the impact of a disability please consult www.uakron.edu/access and the Office of Accessibility at (330) 972-7928.
All assignments must be the **original work** of the student. Submission of work copied or plagiarized from sources such as the Internet, articles, other student work, or any other source will result in a 0 (zero) awarded for the assignment and possible further disciplinary action.

There will be scheduled and unscheduled quizzes. Unscheduled quizzes may not be made up. Make up for scheduled quizzes will have a different format and content.

**Additional Requirements**

- **Email Access**: Email is an essential part of this class. Students are required to have a working email address that they check at least once per day or more. If you are not using your University of Akron email, have your University email forwarded to your email account. Notices posted to email are the students’ responsibility.

- **WebCT**: Course content, grades, discussion groups, and group emails will be posted on WebCT. You are expected to use WebCT resources in this class. You should check the WebCT site at least once a day, especially the discussion groups.

- **Harassment**: Harassment of any type is not allowed in class. This includes but is not limited to populations of disability, gender, race, religion, ethnicity, age, and sexual orientation.

- **University Closing Policy**: Cancellation of classes and closure announcements will be made as early as possible in the day and will clearly state the affected campuses. Call 330-972-SNOW or 330-972-6238 (TDD/Voice for updated information)

- **Class Cancellation**: Class cancellation notices will be distributed via email and a notice posted on the door. If a class is cancelled, students are expected to work on class assignments and projects and use the available time to continue class work. Students are **encouraged** to submit questions and inquiries to the instructor using email.

- **Expected classroom behavior**:
  
  - **Focus on the instruction and activities**: computer work not directly related to the current classroom activities is not permitted. This includes Internet browsing, checking email, printing, talking, or other inappropriate activities. It is distracting to you and the class.

  - **Problem solving and troubleshooting**: An essential part of learning how to use the computer in the classroom is problem solving. Try several solutions, use the help command, or ask your classmate before asking the instructor.

  - **When to ask for help**: When you’ve attempted to solve the problem and haven’t made progress, when you’re feeling frustrated and lost, or you can’t make any progress due to a software or hardware problem. It may take a few minutes to get to you, but you will be helped.

  - Take notes, follow directions, and ask questions. Post questions on the WebCT discussion groups.

**IX. BIBLIOGRAPHY**


Appendix A

Instructional Objectives:

- **INTASC/Ohio Standards**: According to the INTASC/Ohio Standards, students will understand and promote the following criteria through the effective and efficient use of educational technology:
  
  - A - Knowledge of Subject Matter
  - D - Planning of Instruction
  - F - The Learning Environment
  - G - Communication
  - I - Professional Development

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- **Primary Focus**
  - P
- **Integration Experiences Potential (Secondary Focus)**
  - S

- **PRAXIS II Standard**
  - #5
  - #1
  - #3
  - #2
  - #4

**ISTE Standards**: To live, learn and work successfully in an increasingly complex and information-rich society, students must use technology effectively. Within a sound educational setting, technology can enable students to become capable information technology users, seekers, analyzers and evaluators. Through the use of technology, students can become problem solvers and decision makers, creative and effective users of productivity tools, communicators, collaborators, publishers and producers while becoming informed, responsible and contributing citizens. In alignment with the ISTE Standards, teacher candidates will demonstrate educational technology competencies in the following areas:

  - **Standard 1**: Technology Operations and Concepts - Teachers demonstrate a sound understanding of technology operations and concepts.
  - **Standard 2**: Planning and Designing Learning Environments and Experiences - Teachers plan and design effective learning environments and experiences supported by technology.
  - **Standard 3**: Teaching, Learning and the Curriculum - Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning.
  - **Standard 4**: Assessment and Evaluation - Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.
  - **Standard 5**: Productivity and Professional Practice - Teachers use technology to enhance their productivity and professional practice.
  - **Standard 6**: Social, Ethical, Legal and Human Issues - Teachers understand the social, ethical, legal and human issues surrounding the use of technology in Pre-K-12 schools and apply that understanding in practice.
Knowledge, Skills and Dispositions: The course will provide the requisite technical knowledge, skills and dispositions so teachers can utilize technology effectively, efficiently and strategically in the classroom.

PRAXIS II Standards: In alignment with the PRAXIS II Principles of Learning and Teaching, students will demonstrate educational technology competencies in the following areas:

1. Students as Diverse Learners - Differences in the ways students learn and perform: learning styles; multiple intelligences; performance modes: Concrete operational thinkers and visual and aural learners; gender differences; cultural expectations and styles.

2. Instructional Strategies - Methods for enhancing student learning through the use of a variety of resources and materials: computers, Internet resources, Web pages, email; audiovisual technologies such as videotapes and compact discs; local experts; primary documents and artifacts; field trips; libraries; service learning.

3. Planning Instruction - Techniques for planning instruction to meet curriculum goals, including the incorporation of learning theory, subject matter, curriculum development and student development: national and state learning standards; state and local curriculum frameworks; state and local curriculum guides; scope and sequence in specific disciplines; units and lessons; behavioral objectives: affective, cognitive, psychomotor; learner objectives and outcomes.

4. Communication - Basic, effective verbal and nonverbal communication techniques

5. The Reflective Practitioner - Ability to read and understand articles and books about current views, ideas, and debates regarding best teaching practices.

Additional Documentation