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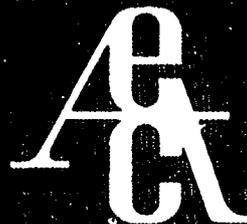
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**ABSTRACT**

The function of media technicians and their place in the field of educational media is described. The technician is differentiated from other classifications such as the library technical assistant and also from other levels such as the aide of professional. The training programs for educational media technicians offered by 28 colleges and junior or community colleges are described. These descriptions include the purpose of each program, the course requirements, and course offerings. Appendixes list all colleges in this country which offer training programs for educational media technicians and those having library technician or technical assistant programs. (JK)

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TRAINING  
PROGRAMS  
FOR  
EDUCATIONAL  
MEDIA  
TECHNICIANS



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# TRAINING PROGRAMS FOR EDUCATIONAL MEDIA TECHNICIANS

C. James Wallington

Carol Bruce



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## INTRODUCTION.

*Training Programs for Educational Media Technicians* is published as a service by the Association for Educational Communications and Technology. It is a revised edition of *Training Programs for Media Support Personnel: An Annotated Directory*. The information this book contains should prove useful to several audiences—to potential students, to colleges considering initiating such a program, and to colleges having an operating program—so that they might exchange mutually beneficial information.

The information contained in the original edition of this volume was collected in a survey conducted in late 1969 as a part of the Jobs in Instructional Media Study (JIMS), a research project funded by the Division of Vocational Education, U.S. Office of Education, and sponsored by the National Education Association's Division of Educational Technology and the Department of Audiovisual Instruction.

In the original survey, postcard questionnaires were mailed to the presidents of the 1,025 junior, technical and community colleges listed in the directory of the American Association of Junior Colleges (AAJC). This list was supplemented by a listing of two-year institutions obtained from the Bureau of Social Science Research. Follow-up postcards were sent to non-respondents. An expanded questionnaire was then sent to those institutions reporting *operating* programs to find out in detail about the kind of program in operation. Follow-up questionnaires to non-respondents, and requests for additional program information were also sent.

Information for this edition of *Training Programs* was gathered in a survey initiated in the summer of 1971. The same procedure as in the original survey was used. Questionnaires were sent to those institutions listed in the 1971-72 AAJC directory, as well as to a number of institutions suggested by respondents and other sources. Since institutions listed in this directory were located primarily on the basis of a single informational source, it is possible that a number of active, ongoing programs have been overlooked. It is hoped that we will be able to include many such programs in a future revision of this book.

The stress of this survey was on the Educational Media Technician. The Educational Media Technician was differentiated from other classifications such as the Library Technical Assistant, the Radio/Television Broadcast Technician, and the Electronics Technician. The Educational Media Technician is defined, fundamentally, as a person with basic production skills in a broad range of media, with maintenance and repair skills for most common items of audiovisual equipment, and with some record keeping and writing skills. However, skills needed by Educational Media Technicians in various employment situations may vary widely. Much depends on the size, emphasis, structure, and services of the employing organization.

This book is divided into five sections:

- this introduction, with an overview of the material;
- a description of the educational media field;
- a description of technician-level work;
- an annotated list of training programs for Educational Media Technicians;
- appendices containing lists of institutions offering training programs for Educational Media Technicians, Library Technicians, and joint Library and Media Technicians.

The basic emphasis of the book is to describe the Educational Media Technician, to identify institutions with training programs for Educational Media Technicians, and to describe those programs and list some institutions with related programs.

There is no attempt here to evaluate programs or to define curriculum. Currently, the Division of Vocational and Technical Education of the U.S. Office of Education has projects under way to develop curriculum guidelines for two-year training programs for both Educational Media Technicians and Library Technical Assistants. The results should be available through ERIC, Stanford University, and perhaps through other sources.

The Council on Library Technology (COLT) publishes a directory of existing or projected Library Technical Assistant programs as well as proceedings of COLT conferences on Library Technical Assistants. Information should be available from Council on Library Technology, Felician College Library, 3800 Peterson Ave., Chicago, Ill. 60659.

If you have any questions, or if you have information you would like to add to the material contained in this book, write to:

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## EDUCATIONAL MEDIA: A FIELD OF WORK.

In the period since the first version of this book was distributed by the Jobs in Instructional Media Study in 1970, there have been a number of changes in the concept of Media Technicians as well as in the field of educational media in general. If one of the characteristics of technology within a field of endeavor is the division of labor and consequent specialization of workers *at all levels* within that field (Differentiated Staffing, 1969), then perhaps educational media is coming of age.

Most certainly, the educational media field—whether under the name of instructional technology, educational communications, educational technology, or learning resources—is receiving more attention than ever before. We have come a long way from the time when James D. Finn (1965) noted that the educational media field was being ignored on a national (albeit federal) level. Since then (1965) the instructional technology field<sup>1</sup> (to use the broad term) has received a great deal of attention. Examples include:

- the national Commission on Instructional Technology;
- inclusion of educational media concerns and personnel in recent White House conferences;
- creation in USOE of a National Center for Educational Technology;
- increased visibility of instructional technology-related programs and projects such as performance contracting, *Sesame Street*, and *The Electric Company*;<sup>2</sup>
- the Banneker school project in Gary, Indiana, the educational communications satellite project;
- recognition by people *outside* of educational media of the field's potential through technology;<sup>3</sup>
- the upsurge of student involvement in media, ranging from *Raindance*, the *Ant Farm*, and guerilla television, to the visual literacy movement reaching into the elementary grades.

Those comprising the field of instructional media are doing some introspection. Indicators of this self-contemplation are:

- a USOE/AECT effort at defining the instructional technology field;
- AECT's formation of task forces to set and implement media standards for a variety of educational institutions;
- AECT's formation of special commissions to study certification of media personnel *at all levels* and accreditation of related training institutions;
- regional concern by state educational media associations in the area of skills and competencies, certification, and accreditation;
- manpower studies based on analyses of jobs and tasks performed under the rubric of educational media.

<sup>1</sup> As Finn (1965) did, names for the field will be used more or less interchangeably, even though they imply quite different points of view.

<sup>2</sup> While the CTW may not think of these programs as "instructional technology," the implications of such programs are very close to instructional technology in its pure form.

<sup>3</sup> As this is written, the bussing of students to provide "quality education" is a national issue. And yet, *Sesame Street* and *The Electric Company* (to cite two currently popular examples) provide "quality education" without bussing. Similarly, teacher strikes may close schools, but do not necessarily have to stop the instruction of children.

This combination of inspection and introspection serves notice, then, that instructional technology—by any name—is growing both in concept and in practice. Whether or not the field can be defined, it still grows. The very fact of its existence may serve as its *raison d'être*. And as the field expands, it draws in more personnel. As it expands on a technological base, it brings an increasing demand for specialized personnel. If we are to discuss the specializations involved, we need to draw upon some explication or model of the field. To avoid becoming overly involved in the morass of definitions currently available a simple analogue, which lends itself, is used here—the Domain of Instructional Technology. This model, developed by Kenneth Silber, has been explained in both popular (Silber, 1970) and academic (Hyer, 1972) frameworks. The model is particularly useful since:

- Its parameters are broad enough to include almost all instruction-related activities.<sup>4</sup>
- Its concern with specific functions and resources makes it easily applicable to specific situations.
- Its inclusion of definitions and examples makes it useful as a *lingua franca* between organizations and people with differing viewpoints.

Briefly summarizing,<sup>5</sup> the Domain of Instructional Technology starts with a learner.



It then says that certain things affect, touch or impinge upon this learner. These can be called learning resources, tools, instructional factors, or a host of other names. Silber chose to call them "Instructional System Components" or ISCs.<sup>6</sup> Whatever the name, the important thing to remember is that they bear *directly* upon the learner. They serve as resources for the learner.<sup>7</sup> The ISCs become more clear as they are classified and defined and as examples are given.<sup>8</sup>

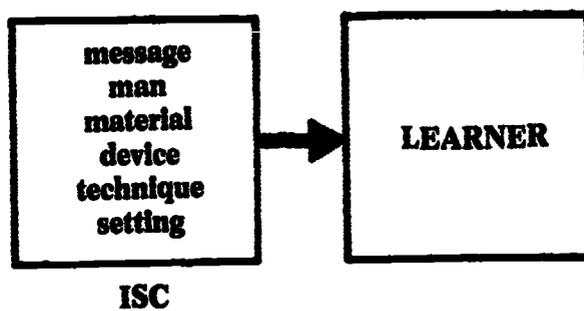
<sup>4</sup> This is vital because a true "instructional technology" should encompass most if not all phases of instruction. Incidentally, it is this sort of scope which separates the now traditional "educational media" point of view from the "educational" or "instructional technology" point of view.

<sup>5</sup> The material here is drawn from a previously mentioned article by Silber.

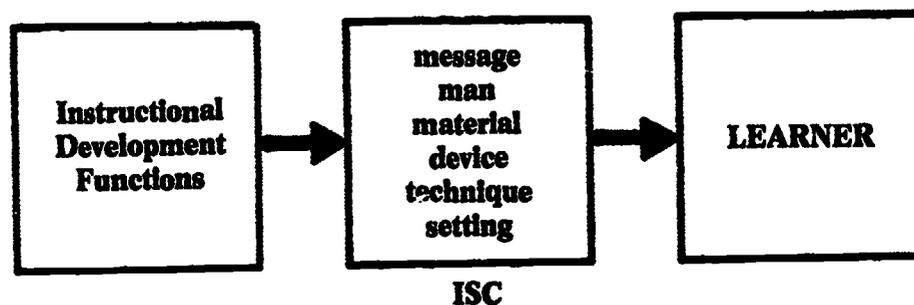
<sup>6</sup> This is perhaps a bad choice of words due to the connotations of "systems" and the fact that (on paper) activities are considered the components of some instructional systems.

<sup>7</sup> For clarity, the term "learning resources" will be used interchangeably with Instructional System Components.

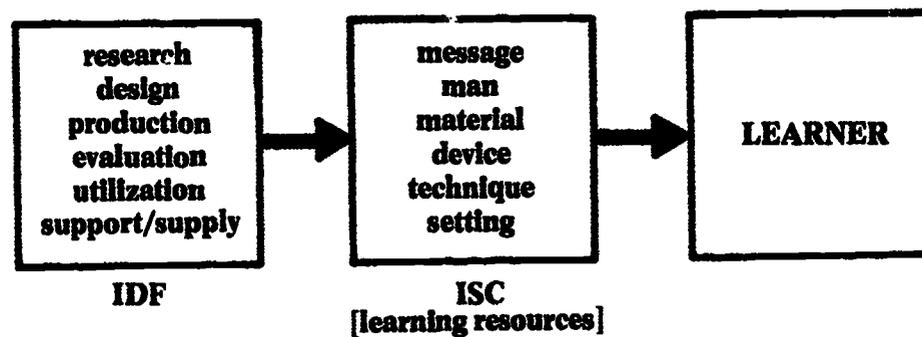
<sup>8</sup> See Silber reference for precise definitions and examples.



The basic breakdown of ISCs is into Messages (the content), Man (persons who give messages to learners), Materials (software or items in which messages are stored), Devices (hardware or items used to display messages), Techniques (procedures or methods to transmit messages), and Settings (the environment, room or "surrounds" in which the message is presented). But classrooms, films, teachers, and information rarely spring full-blown into the learner's world. Most of the effective resources undergo some sort of handling or manipulation to get them in front of the learner. Silber's Domain of Instructional Technology calls these manipulations or resource development activities "Instructional Development Functions."

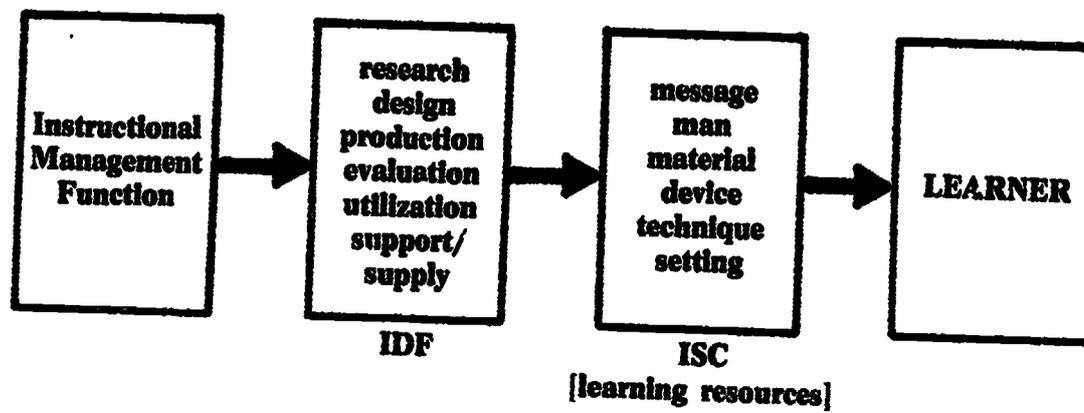


As with Instructional System Components or Learning Resources, the term Instructional Development Functions (IDF) is a bit formidable. But if we break it down into a list of functions, it is easier to handle.

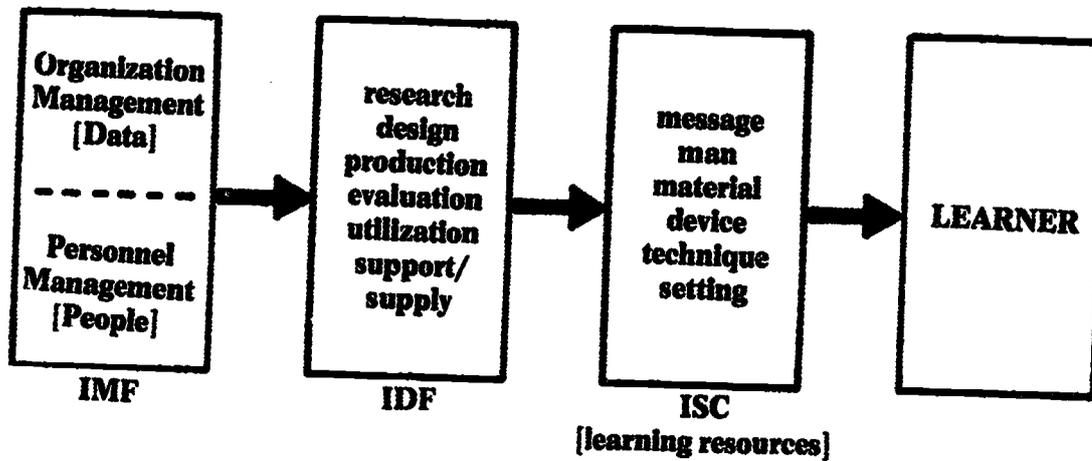


The basic list of functions includes Research (investigating and testing various kinds of learning resources, whether the resource is a material or a technique), Design (preparing the specifications of and directions for producing a learning resource), Production (actually producing a learning resource of some kind), Evaluation (choosing and assessing the merit of learning resources), Utilization (bringing the learner in actual contact with a learning resource—sometimes done by the learner himself), and Support-Supply (performing logistic operations to provide learning resources).

A final aspect of the Domain of Instructional Technology should be mentioned. In most circumstances, there is an overall management that happens—an Instructional Management Function.



Since there is a difference between dealing with people and paperwork, Silber made two gross distinctions in the Instructional Management Functions organization: management and personnel management.

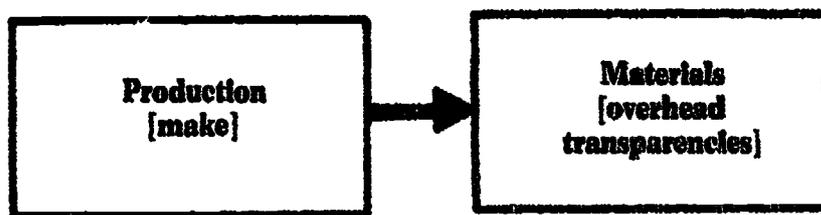


To recap, the Instructional Systems Components or Learning Resources are things which directly touch the learner. The Instructional Development Functions are activities which bring Learning Resources into contact with the learner. The Instructional Management Functions manage or direct the thrust of the Instructional Development Functions. To show how the Domain of Instructional Technology can be used, let's look at some sample activities which fall within it.

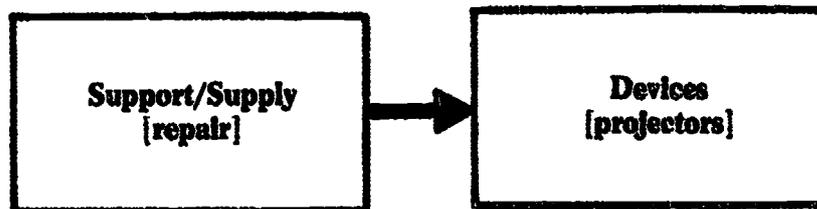
"I'm an audiovisual building coordinator, and I make overhead transparencies, repair projectors, and select films for my classes. How do I fit in this Domain of whatever?"

First, what you're called isn't as important as what you do. Here's how the three tasks

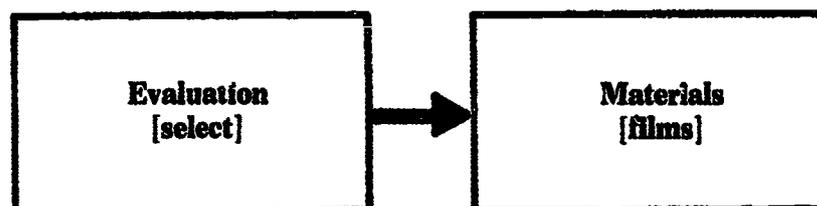
you mentioned are classified in the Domain of Instructional Technology: "...make overhead transparencies. . ."



"...repair projectors. . ."



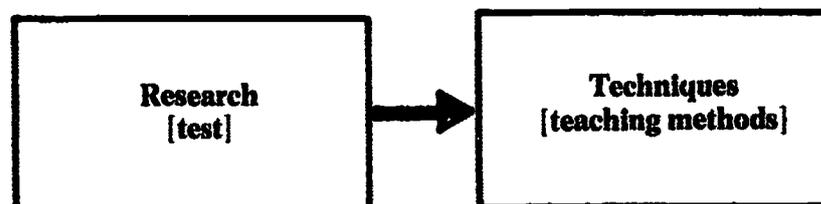
"...select films for my classes. . ."



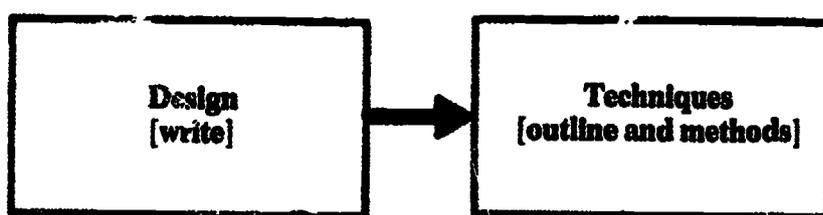
"That's fine for him, but I'm different. I work in the development of training materials for the armed forces. I test the effectiveness of various ways of teaching and write the course outline and methodology, then train instructors to use my methods. I can't fit into that same Domain of Instructional Technology."

It doesn't matter whom you work for—it's what you do. The tasks you name fit this way:

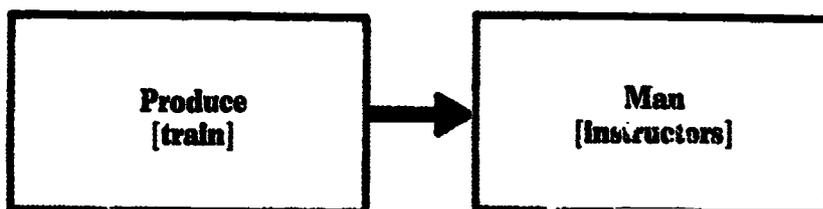
"...test teaching methods. . ."



"...write course outline and teaching methods..."



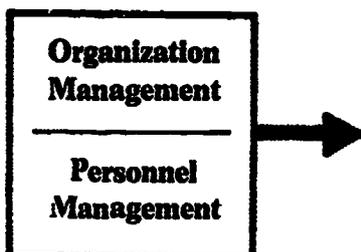
"...train personnel to use methods..."



"I don't get deeply involved in any specialty. I run the media center. We have an extensive collection of materials and equipment which we deliver to the faculty on 24-hour notice. I also arrange for evaluation groups to preview materials, and then I buy what they recommend. Our shop can produce videotapes, 8mm filmloops, slides, and transparencies. The teachers tell us what they want and we turn out the product. Then I..."

Hold on just a minute! That sample will do!

"...administer media center and staff..."



“...a collection of materials and equipment...”



The question now is what does the media center do?

“...deliver...evaluate...buy...produce...”

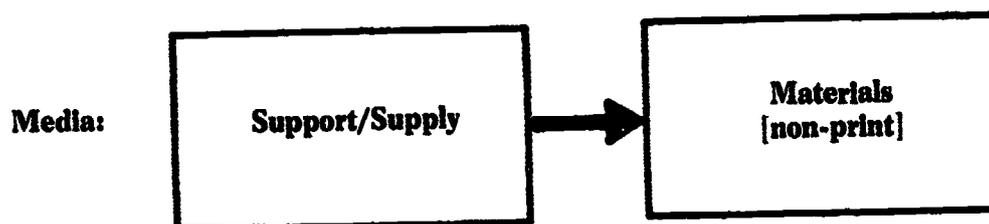


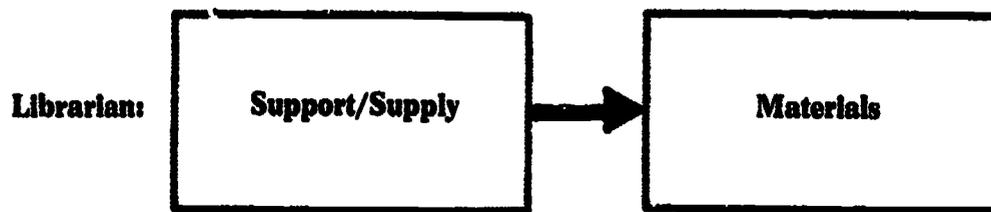
By grouping activities in broad functional areas, the Domain of Instructional Technology allows people to see their general relation to each other and to the learner. In this way, it serves to bridge some of the communication gaps between people. One example is the supposed “library-audiovisual” difference—if such a difference exists. Instead of talking about job titles, certificates, and association affiliations, the key similarities and differences can be examined.

For example:

**Media:** I maintain and schedule media. I don't deal in books. So, I'm different from a librarian.

**Librarian:** Not that much. I have filmstrips in my collection.  
Similarities? Differences?



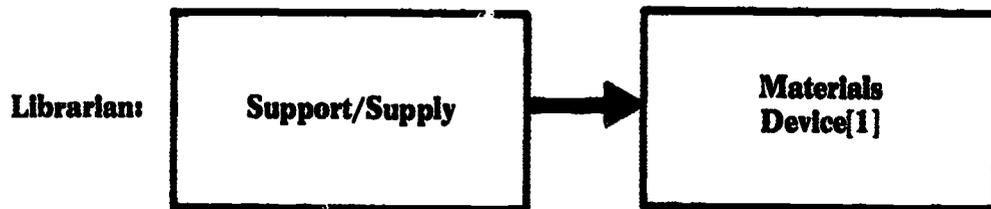
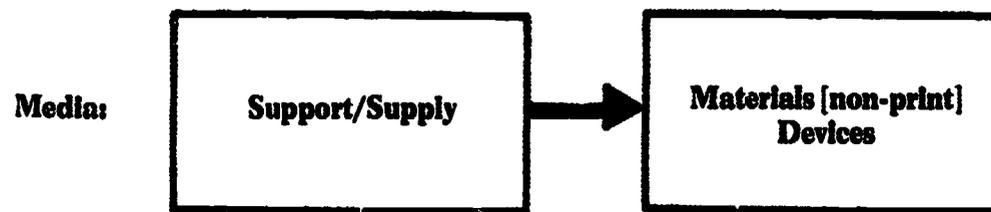


**Media:** But that's not fair. You're not counting my projectors and my film inspector.

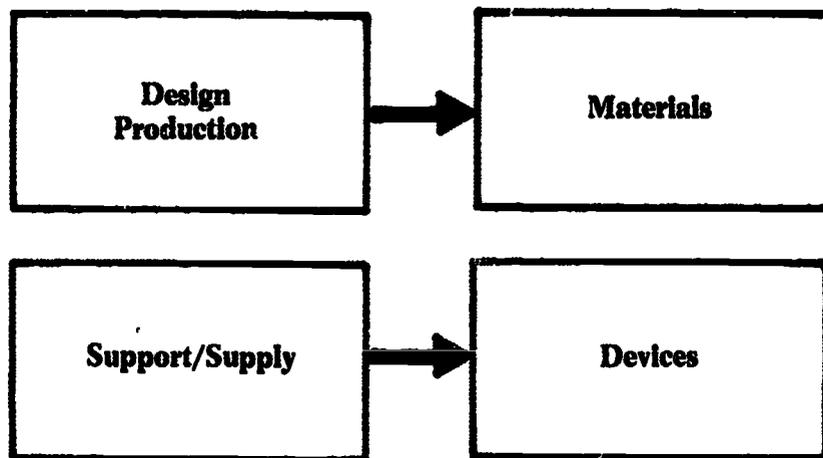
**Librarian:** I have a filmsrip viewer.

Similarities?

Differences?



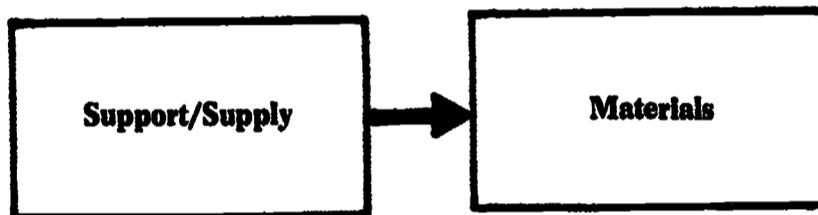
The point is that titles *don't* make the difference—activities do. Which leads us to the point of all this explanation in a book about Educational Media Technicians. Herein, Educational Media Technicians generally have as their *primary* areas of concern: <sup>9</sup>



AND



Educational Materials Technicians also operate secondarily in the following areas:

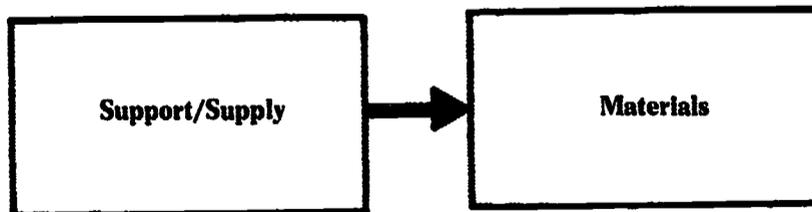


The preceding does *not* mean that they are excluded from other functions. An inventive mind can find tasks for them in almost *any* function. The foregoing areas of concern are the "average" or "general" or "norm", with a profound understanding that each technician and each situation is to be considered individually.

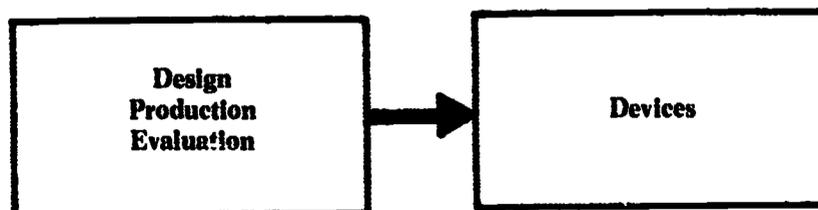
Two more caveats about the Domain of Instructional Technology: First, the functions and resources are *not* hierarchical. One function is not "better" or more complex than another. The same is true of Learning Resource Instructional System Components. Each function and resource is to be treated on a parity with any other. This point is crucial if we are to break down barriers to cooperation between traditional educational fields.

The second admonition is actually an offshoot of the first. It is that each function contains tasks at *all* levels of complexity. For example, the management function contains file work by a clerk as well as policy setting by the chief administrator. The

9 Contrast this with *prime* areas of concern of Library Technical Assistants



or Electronic Technicians



research function includes both the formulation of learning theories done by a psychologist as well as the monitoring of a test by a graduate student. The production function includes both writing scripts and developing film. This concept is particularly important, since it means that all *levels* of personnel can work in each function. And, it is the level or complexity of work—not the Domain of Instructional Technology Function—that determines how skilled a worker must be.

This has particular application when we talk about the Educational Media Technician. We have already pointed out his prime areas of concern in the Domain of Instructional Technology. The next section defines the level at which he works.

#### **References**

Differentiated Staffing and Instruction, multimage presentation. Washington, D.C.: Association for Educational Communications and Technology, 1969.

Finn, James D. The Marginal Media Man. *Audiovisual Instruction*, December 1965, pp. 762-765.

Hyer, Anna L., et al. *Jobs in Instructional Media Study. Final Report.* (USOE Project No. 8-0688.) ERIC, 1972, in press.

Silber, Kenneth H. What Field Are We In, Anyhow? *Audiovisual Instruction*, May 1970, pp. 21-24.

## THE TECHNICIAN: A LEVEL OF WORK.

There are two ways of distinguishing the Educational Media Technician from other workers. The first way is to describe his work area, educational media. This was done in the preceding section. The second way is to describe the work level of the technician—both in general, and specifically in educational media as we have defined it. In a recent publication on training programs for technicians,<sup>1</sup> the U.S. Office of Education offered some of its concept of technology and technicians. Inasmuch as the concern of the publication was technician training programs, the characteristics for a field of technology for which technicians may be educated<sup>2</sup> centered around training programs, manpower, and associations in a field. Briefly, the five characteristics are:

- Specialized professionals.
- National associations related to the field.
- Enough applied science to require a division of labor.
- Rigorous two- to four-year training programs for technicians.
- Enough specialized knowledge to make the technician training program "to be a sequence of related courses."<sup>3</sup>

The emphasis of the technician's abilities and activities strongly reflect his historical development in the "hard sciences" such as chemistry and physics. For example, one suggested activity is to:

1. Apply knowledge of science and mathematics extensively in rendering direct technical assistance to physical and/or biological scientists, engineers, or medical personnel engaged in scientific research and experimentation.<sup>4</sup>

Other activities do apply more to some facets of the social sciences:

Advise regarding the operation, maintenance, and repair of complex apparatus and equipment with extensive control systems.

Plan production, operations or services as a member of the management unit responsible for efficient use of manpower, materials, money, and equipment or apparatus in mass production or routine technical or specialized personal service.

Advise, plan, and estimate costs as a field representative of a manufacturer or distributor of technical apparatus, equipment, services, and/or products.

Select, compile, and use technical information from such references as engineering standards; handbooks; biological, agricultural, or medical and health-related procedural outlines; and technical digests or research findings.

Analyze and diagnose technical problems that involve independent decisions. Judgment requires substantive experience in the occupational field in addition to knowledge of scientific principles and technical know-how.

Deal with a variety of technical problems involving many factors and variables which require an understanding of several technical fields. This versatility is a characteristic that relates to breadth of applied scientific and technical understanding, the antithesis of narrow specialization.

<sup>1</sup> *Criteria for Technician Education: A Suggested Guide.* (OE-80056) Washington, D.C.: United States Government Printing Office, 1968.

<sup>2</sup> *Op. cit.*, p. 6.

<sup>3</sup> *Op. cit.*, p. 7.

<sup>4</sup> *Op. cit.*, p. 4.

However, in either physical, natural or social sciences, the question remains, "What distinguishes the technician from those who work for him and those for whom he works?" One possible answer has come as a result of two years of experience in a project called the Jobs in Instructional Media Study (Hyer *et al.*, 1972), which brought a more clear understanding of the technician, *in any field*.

The research focused on task analysis of practitioners *at all work levels* in the educational media field. Tasks were coded according to a number of scales used in Functional Job Analysis. These scales measure the orientation of the task toward Data, People and Things; the level of complexity of the task; the General Education Development needed to perform the task; and very important, the amount of *instruction needed by the workers* to complete the task.

The Worker Instruction scale, which has a high correlation with the other scales, proved to be the key to describing a technician level of activity. The scale itself has eight levels, ranging from the lowest, Level 1—

Inputs, outputs, tools, equipment, and procedures are all specified. Almost everything the worker needs to know is contained in his assignment. He is supposed to turn out a specified amount of work or a standard number of units per hour or day.<sup>5</sup>

—to the highest, Level 8—

Information and/or direction comes to the worker in terms of needs (tactical, organizational, strategic, financial). He must call for staff reports and recommendations concerning methods of dealing with them. He coordinates both organizational and technical data in order to make decisions and determinations regarding courses of action (outputs), for major sections (divisions, groups), of his organization.

Analysis of these levels and clustering of tasks by Worker Instruction levels led to the emergence of three basic task groupings: Entry, Middle and Advanced. These groupings are also called Aide (Entry), Technician (Middle), and Specialist or Professional (Advanced). Essentially, the Entry/Aide level is composed of Worker Instructions 1-3, the Middle/Technician level of Worker Instructions 3-5, and the Advanced/Specialist level of Worker Instructions 5-8. The overlap is deliberate, to allow transitions from one grouping to another. In essence, the Entry/Aide grouping has been extended upward into the Middle/Technician level by adding Level 3 to Entry/Aide level. The Advanced/Specialist grouping has been extended downward by the addition of Level 5 from the Middle/Technician grouping. Thus, the best representation of the Middle/Technician are Worker Instruction Levels 3, 4 and 5, which are:

3. Inputs and outputs are specified, but the worker has considerable freedom as to procedures and timing, including the use of tools and equipment. He has to refer to several standard sources for information (handbooks, catalogs, wall charts). Time to complete a particular product or service is specified, but this varies up to several hours.

4. Output (product or service), is specified in the assignment, which may be in the form of a memorandum or of a schematic (sketch or blueprint). The worker must work out his own ways of getting the job done, including selection of tools and equipment, sequence of operations (tasks), and obtaining important information (handbooks, *etc.*). He may either carry out work himself or set up standards and procedures for others.

<sup>5</sup> Fine, Sidney A. *A Systems Approach to Job Design and Manpower Utilization*. (Mimeographed paper) Washington, D.C.: The W.E. Upjohn Institute for Employment Research, 1969.

5. Same as (4) above, but in addition the worker is expected to know and employ theory so that he understands the whys and wherefores of the various options that are available for dealing with a problem and can independently select from among them. He may have to do some reading in the professional and/or trade literature in order to gain this understanding.<sup>6</sup>

Compare these with the technician activities previously suggested.

What distinguishes the technician level, then, from other levels of workers is how he receives his work assignment and how he goes about it. This method of approach to a task becomes the crucial variable in defining the technician. A technician, once the task is assigned and *the output is specified*, is expected to complete the task with minimal guidance and supervision. He must be, to a great degree, self-programming within the limits of his training and experience. Descriptions and examples adapted from *Audiovisual Instruction of Aides, Technicians and Specialists* should serve to clarify the groupings:<sup>7</sup>

*Aides:* have specific instructions about the tasks they perform. The task may be only part of a process, the other parts of which the aide cannot or does not control (e. g., drying photographic prints, but not necessarily enlarging or developing them). Aides can be trained for a task in a relatively short period of time, since almost everything they need to know is contained in the task. Aides are not required to solve problems external to the task. If something happens which is not covered by the instructions, the aide asks for help and cannot be held responsible for solving the problem.

*Technicians:* have instructions which deal more with a cluster of tasks leading to a specified output. The technician may have a choice of routines to reach a given output. He has a broader view of the situation and is expected to generalize more from task to task than the aide. The technician is responsible for the product as long as all of the routines necessary to reach the output have been specified and made available to him. The example (again photographic) is that the technician may be told to produce six 8" x 10" prints from a given negative, as well as to take the pictures and develop them.

*Specialists:* do not have as many routines and tasks specified. They become saddled with the general problem and then try to determine what the product would be in the first place and then how best to go about it. Having defined the goals, they are often forced to develop the routines or tasks necessary to implement the goals. They deal with a broad process approach. Following the previous examples, the specialist would most likely receive instructions such as, "Gail, this is the superintendent. I think we should do some publicity for the PTA and the board on that math project. Take care of it, will you?" Perhaps the solution may require some 8" x 10" photographs, perhaps not. The task assignment does not specify.

There should be a pointed admonition at this point. The levels described are levels of tasks. If a worker with little or no formal training performs a Middle/Technician task successfully, he is functioning *in that instance as a technician*. If a media specialist with a doctorate in educational technology performs an Entry/Aide level task, he is functioning as an *Aide*, degrees and semester hours to the contrary. There may be any number of good reasons for him to do so, but his training does *not* change the Worker Instruction level of the task, if he follows the directions given for the task. I would like

<sup>6</sup>Fine. *op. cit.*

<sup>7</sup>Bernotavicz, Freda D. and Wallington, Jim. Act I of *Jims. Audiovisual Instruction*. May 1970, p. 30.

to close with a final note, taken from the same article.<sup>8</sup> It applies equally to aides, technicians and specialists.

All of our analyses dealt with people and if any one thing differs widely, it surely is people. The task analyses define minimal levels of competency and do not take into consideration the worker who puts something extra into the job, who can figure out a better way to do things, who wants to do his job better. People of this caliber are a precious commodity. Hire them and encourage their growth. But recognize that people bring themselves to the task and thereby can change the task in some respects.

#### **References**

Hyer, A., et al. *Jobs in Instructional Media Study, Final Report*. (USOE Project No. 8-0688.) ERIC, 1972, in press.

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<sup>8</sup> Bernotavicz, *op. cit.*, p. 30.

**EDUCATIONAL MEDIA TECHNICIAN PROGRAMS.**  
Annotated Listing.

**PIMA COLLEGE**  
Tucson, Arizona 85709

Contact:  
Harold C. Gluth, Director  
Learning Resource Center

The Instructional Media Technology curriculum at Pima College is a two-year program organized to provide basic knowledge and skills in the areas of communigraphics, reprographics, telecommunications, and audiovisual equipment repair and maintenance. A student may choose to specialize in one of the four optional areas, or he may prefer not to specialize, but rather to select courses from each of the areas for general preparation. The program is designed to prepare students to play a paraprofessional role in educational institutions, public institutions, business, and industry.

**COMMUNIGRAPHICS OPTION**

**FRESHMAN YEAR**

<i>First Semester</i>		<i>Second Semester</i>	
COM 1 Communications	3	COM 2 & 3 Communications	3
Humanities	3	MET 82 Instructional Media Technology II	3
Physical, Social, Behavioral Science Elective	3	MET 50 Communigraphics I	3
MET 80 Media Terminology	1	Elective	3
MET 81 Instructional Media Technology	3	Elective (Optional Area)	4-5
	—		—
	16		17

**SOPHOMORE YEAR**

<i>First Semester</i>		<i>Second Semester</i>	
MET 53 Photographic Technology for Media Production	3	MET 86 Implications of Media Technology	3
Physical, Social, Behavioral Science Elective	3	Field Work	3
Ethnic Studies	3	Electives (Optional Area)	10
Field Work	3		—
Elective (Optional Area)	4		16
	—		—
	16		

### REPROGRAPHICS OPTION

**FRESHMAN YEAR**

*First Semester*

COM 1 Communications	3
Humanities	3
Physical, Social, Behavioral Science Elective	3
MET 80 Media Technology	1
Instructional Media Technology I	3
	16

*Second Semester*

COM 2 & 3 Communication	3
MET 82 Instructional Media Technology II	3
Offset Printing I	4
Elective (Optional Area)	7
	17

**SOPHOMORE YEAR**

*First Semester*

Physical, Social, Behavioral Science Elective	3
Ethnic Studies	3
Field Work	3
Offset Printing II	4
Electives	3
	16

*Second Semester*

MET 86 Instruction of Media Technology	3
Field Work	3
Electives (Optional Area)	10
	16

### TELECOMMUNICATIONS OPTION

**FRESHMAN YEAR**

*First Semester*

COM 1 Communications	3
Humanities I	3
Physical, Social, Behavioral Sciences Elective	3
Media Technology	1
Instructional Media Technology	3
Elective	3
	16

*Second Semester*

COM 2 & 3 Communications	3
Instructional Media Technology II	3
Drama 20 Stagecraft & Production	2
ETR 53 Fundamentals of Electronics	6
Elective	3
	17

**SOPHOMORE YEAR**

*First Semester*

Physical, Social, Behavioral Science Elective	3
Ethnic Studies	3
Telecommunications TV Workshop	4
Field Work	3
Elective	3
	16

*Second Semester*

Implications of Media Technology	3
Telecommunications Production	4
Field Work	3
Telecommunications Television Production	3
Elective	3
	16

### AUDIO-VISUAL MAINTENANCE AND REPAIR OPTION

#### FRESHMAN YEAR

##### *First Semester*

COM 1 Communications	3
Humanities I	4
Physical, Social, Behavioral Science Elective	3
ETR 82 Math	2
MET 80 Media Terminology	1
MET 81 Instructional Media Technology I	3
	—
	16

##### *Second Semester*

COM 2 & 3 Communications	3
CSC 47 Introduction to Computers	6
ETR 53 Fundamentals of Electronics	6
ETR 55 Trans. & Vacuum Tubes	3
MET 82 Instructional Med Technology II	4
	—
	16

#### SOPHOMORE YEAR

##### *First Semester*

Physical, Social, Behavioral Science Elective	3
Ethnic Studies	3
Elective (MET Option)	3-4
Home Entertainment Equipment Circuits	3
Field Work	3
	—
	16

##### *Second Semester*

Art 5	3
MET 84 Implications of Media Technology	3-4
Elective	3
Field Work	3
Home Entertainment Equipment Trouble Shooting & Repair	3
	—
	16

### COURSE DESCRIPTIONS

#### **MET 50 Communigraphics I (3 units).**

Covers the fundamentals of basic design in relationship to space, line and layout of elements. Color relationships and typography will be dealt with, as well as techniques in the use of equipment designed for commercial graphics. Various methods of printing reproduction will be studied in relation to the design process.

**MET 70 Instructional Media Technology Equipment Repair and Maintenance (3 units).** Electrical and mechanical repair and maintenance of instructional equipment including tape recorders, projectors, mechanical graphics arts devices, etc.

#### **MET 90 Telecommunications—Television Workshop (4 units).**

Experience in the production of various types of television programs. Emphasis on the production of special programs for educational, community and industrial use. Utilization of television equipment in remote and on-location sites as well as in studio operation.

#### **MET 59 Field Work (6 units).**

Field work in instructional media technology at specified locations on or off campus.

#### **MET 91 Telecommunications—Television Production (3 units).**

Students learn to function as part of television production crews. They operate in all areas of production and work with all the basic tools of television production.

**MET 53 Photography—Technology for Media Production (3 units).**  
Technique of presenting visual material on transparencies and movie film. Includes still copy technique and simple animation.

**MET 81 Instructional Media Technology I (3 units).**  
Exploration and overview with laboratory experience in the preparation, presentation and full utilization of instructional media. Areas covered are still projection, motion picture projection, graphic arts, record players, tape recorders, broadcast sound systems, educational TV, programmed instruction, supporting equipment for instructional media, and non-projected instructional media materials.

**MET 83 Instructional Media Technology III (3 units).**  
The functions and responsibilities of the media specialist in an industrial or educational audiovisual department. Various procedures in ordering, inventory, maintenance, and budgeting for media operation. Responsibilities and opportunities for media specialists are surveyed. Media facilities are designed and equipment evaluated. Legal aspects of media production involving copyright are discussed.

**MET 80 Media Terminology (1 unit).**  
Introduction to the language of the media field. Application of terminology in verbal and written communications to provide an understanding of these terms for working in the media field as technicians.

**MET 82 Instructional Media Technology II (3 units).**  
Development of specific audiovisual skills and understanding their relationship to the learning process; basic psychology of learning; understanding human relations; techniques of problem solving; and the conversion of ideas into audio and/or video materials. Study of the functions and responsibilities of the LRC.

**MET 86 Implications of Media Technology (3 units).**  
Effects of media technology on the individual and his society, covering multi-media, computer-managed instruction, computer-assisted instruction, audio-tutorial systems, television, radio, film, programmed instruction, EVR, dial-access systems, man-machine relationships in systems approaches to solving teaching-learning problems.

**CITY COLLEGE OF SAN FRANCISCO**  
San Francisco, California 94112

Contact:  
Jules Frade  
Dean of Instruction

City College of San Francisco is a public two-year college, accredited by the Western Association of Schools and Colleges. It has an enrollment of over 12,000.

The college offers a two-year program in Audio Visual Services designed to prepare students for employment as specialists in the use and operation of audiovisual equip-

ment, and in the preparation of instructional displays for use in schools on all levels, especially elementary and secondary schools. Students who complete the curriculum with an average final grade of C or higher receive an achievement award, the Certificate of Proficiency in Audio Visual Services. Graduates are also qualified for employment as specialists in these capacities in the instructional materials departments in public and private school systems.

#### AUDIO VISUAL SERVICES PROGRAM

<i>First Semester</i>		<i>Second Semester</i>	
Art 57	4	Art 59	3
Business 80	2	English	3
English	3	Photography 75	3
Community Service 50	1	Physical Education	1/2
Library Technology 51	3	Sociology G11	3
Mathematics E (or Elective)	1	Electives	3
Personal Health	1		—
Physical Education	1/2		15 1/2
	—		
	16 1/2		
<i>Third Semester</i>		<i>Fourth Semester</i>	
Broadcasting 27	2	Broadcasting 28	2
Community Service 70A	3	Community Service 70B	3
Photography 65A	2	Physical Education	1/2
Physical Education	1/2	Psychology G6	3
Political Science 35 or 56	3	Electives	6
Psychology 60	3		—
Speech	3		14 1/2
	—		
	16 1/2		

#### COURSE DESCRIPTIONS

##### **27 Television Workshop (2 units).**

Designed to give students knowledge of and experience in the techniques and skills used in television production. Facilities include cameras, lights, projectors, audio equipment, and other components of the college closed-circuit television broadcasting system.

##### **28 Television Workshop (2 units).**

Designed to give students further knowledge of and experience in the techniques and skills used in television production. Facilities include cameras, lights, projectors, audio equipment, and other components of the college closed-circuit television broadcasting system.

##### **50 Orientation to Teacher Assisting and Audio Visual Services (1 unit).**

Trends in teaching assisting and audiovisual services. Educational requirements and employment opportunities for technicians, assistants and aides in education.

**51 Introduction to Libraries and Library Materials (3 units).**

An introduction to libraries and their use: their types, functions and organization; basic library tools, including catalogs, indexes, reference works; arrangement of books on shelves. Provides library background essential for the teacher assistant.

**57 Instructional Visuals (4 units).**

Introduction to children's art techniques and media. Exploration of techniques and media used in visual instruction with emphasis on available materials.

**59 Instructional Media (3 units).**

Lectures cover the philosophy of the audiovisual movement, its importance in the field of communication in general, and its application to education in particular. Laboratory periods include instruction and practice in the following: the use of bulletin boards, flannel boards, magnetic boards, 35mm slides, and other simple materials; preparation of materials for the overhead projector, tape recorder, and other machines; the development of skill in handling the various kinds of audiovisual equipment.

**65A Fundamentals of Elementary Color Photography (2 units).**

Basic principles of photographing with reversal film. Discussion of color, relationships of light quality, exposure, composition, and kinds and types of film. Class demonstrations and projection and criticism of color transparencies made by students.

**65B Color: Mixed Media and Communication (3 units).**

A course primarily involved with color transparency materials.

**70A Supervised Work Experience and Conference—Elementary (3 units).**

Observation and supervised work experience in an elementary school. Discussion and evaluation of work experience.

**70B Supervised Work Experience and Conference—Elementary (3 units).**

Observation and supervised work experience in an elementary school. Discussion and evaluation of work experience.

**75 Elementary Photography.**

A basic course in photography, dealing with the fundamentals of exposure, development, contact printing, enlarging. Assigned photographs taken with the department's four-inch by five-inch view cameras.

**GROSSMONT COLLEGE**

El Cajon, California 92020

Contact:

Richard S. Meyers  
Instructional Media Coordinator

Grossmont College, with an enrollment of over 10,000, is accredited by the Western Association of Schools and Colleges.

A program with a major in Instructional Media Technology leading to an Associate degree was initiated in September 1969. Students enrolling in the program learn how to prepare materials in the areas of photography, graphic arts, audio and video recording, and educational television. They learn to use and service the various equipment involved in the use of these materials. This prepares the students for employment in schools, businesses and industries using audiovisual and the newer types of instructional media.

### INSTRUCTIONAL MEDIA TECHNOLOGY

#### FIRST YEAR

##### *First Semester*

Media Production  
Elementary Photography  
Speech  
Guidance  
Communication Arts  
English  
Physical Education

##### *Second Semester*

Multi-Media Production  
Media Graphics  
English  
History  
Education  
Health Education  
Physical Education

#### SECOND YEAR

##### *Third Semester*

Equipment Repair & Maintenance  
Broadcast Studio Operations  
American Government  
Library Technology  
Data Processing  
Physical Education

##### *Fourth Semester*

Field Experience in Instructional Media Technology  
Television Production  
California History  
Psychology or Sociology  
Behavioral Science  
Intermediate Photography or Graphic Arts  
Physical Education

#### COURSE DESCRIPTIONS

##### **Instructional Media Technology 120—Media Production (3 units).**

Exploration and overview with laboratory experience in the preparation, presentation and full utilization of instructional media. Covered are areas of still projection, motion picture projection, graphic arts, record players, tape recorders, broadcast sound systems, videotape recordings, programmed instruction, supporting equipment for instructional media, and non-projected instructional media materials.

##### **Instructional Media Technology 130—Multi-Media Production (3 units).**

Emphasis on advanced techniques of instructional media production and utilization. Multiple audio recording, multi-screen presentations, multi-image presentations, multi-media presentations, etc.

##### **Instructional Media Technology 140—Media Graphics (3 units).**

A practical approach to the local production of visual instructional media, including illustrations, charts, diagrams, cartoons, lettering, and technical drawings. Various forms of presentation covered include television, slides, filmstrips, bulletin boards, display easels, overhead and opaque projections, films, and large scale layouts. Reproduction techniques and the preparation of graphics for printing operations are also covered.

**Instructional Media Technology 150—Equipment Repair and Maintenance (3 units).**  
Electrical and mechanical repair and maintenance of equipment, including tape re-  
recorders, projectors, mechanical graphic arts devices, etc.

**Instructional Media Technology 250—Field Experience in Instructional Media  
Technology (3 units).**  
Field work in instructional media technology at specified locations on or off campus.

**Photography 120—Elementary Photography (3 units).**  
Introduction to photography covering all aspects, from the use of the camera to the final  
print.

**Telecommunications 122—Broadcast Studio Operations (3 units).**  
Operation of studio and control room equipment and the techniques of production  
needed for broadcast operation. Includes the operation of video/audio equipment and  
motion picture equipment. Elementary technical theory of broadcast engineering.

**Telecommunications 128—Television Production (3 units).**  
Telecommunications 128 and 122 may be taken concurrently with instructor's permis-  
sion. Students will learn to function as part of television production crews. They will  
operate in all areas of production and will work with all the basic tools of television  
production.

**Telecommunications 138—Television Workshop (4 units).**  
Experience in the production of various types of television programs. Emphasis on the  
production of special programs for educational and industrial use. Utilization of tele-  
vision equipment in remote and on-location sites as well as in studio operations.

**COMMUNITY COLLEGE OF DENVER**  
Denver, Colorado

Contact:  
Robert Berg Jr.

The demand for the services of individuals trained in audiovisual technology is presently quite strong, and the interest in such personnel throughout this state and other states has been high for some time. The student in the Audio-Visual Technology program will develop basic skills, from simple familiarization with the repair of hardware to the various techniques encountered in the educational media field. Trainees will be prepared to enter business, industry and educational systems upon completion of the program.

## AUDIO-VISUAL TECHNOLOGY PROGRAM

### FIRST YEAR

#### *First Quarter*

EG 100 Occupational Communications	3	
M 105 Intro. to Algebra	3	
LT 100 Intro. to Library Organization	3	
MG 105 Intro. to Business	3	
AV 100 Intro. to Media	3	
	15	

#### *Second Quarter*

EG 107 Occupational Communications or S110 Intro. to Speech	3	
PY 107 Psychology of Personal Development	3	
ET 100 Basic Electricity & Magnetism	3	
ET 111 Basic Electricity Lab DC	4	
Elective	3	
	16	

#### *Third Quarter*

PY 100 Human Relations in Business & Industry	3	
AV 102 Sound Application	3	
LT 200 Audio-Visual Graphics	4	
AV 101 Graphic Arts	3	
Elective	3	
	16	

### SECOND YEAR

#### *Fourth Quarter*

EG 108 Occupational Communications	3	
AV 202 Projection Equipment Maintenance	3	
CM 211 Basic Photography	3	
LT 130 Intro. to Technical Services	4	
Social Science Elective	3	
	16	

#### *Fifth Quarter*

ET 102 AC Theory & Vacuum Tube Devices	5	
ET 112 AC Theory & Vacuum Tube Devices Lab	4	
AV 200 Motion Picture & Video Tape Production	3	
AV 203 Projector Equipment Maintenance	3	
	15	

#### *Sixth Quarter*

AV 204 Transcription Equipment Maintenance	3	
AV 205 Basic Acoustics & Optics	3	
AV 297 Cooperative Work Experience	4	
Elective	3	
	14	

### COURSE DESCRIPTIONS

#### **AV 100 Introduction to Media (3 units).**

Course is designed to impart the philosophy, aims and goals of the educational media field. Stress will be placed on understanding the role of audiovisual aids.

#### **AV 101 Graphic Arts (3 units).**

Training in graphic arts technology as related to the reproduction of various graphic design techniques. Provides opportunity to develop basic skills in offset lithography, screen process, and relief printing.

#### **AV 102 Sound Application (3 units).**

This course is designed to develop competencies in the recording of sound for use in

instructional situations. Techniques of tape and disc recording. Editing, mixing and other technical aspects.

**AV 200 Motion Picture and Video Tape Production (3 units).**  
Develops proficiencies in the production of 8mm and 16mm motion picture film and videotape which can be used for instructional purposes.

**AV 202 Projection Equipment Maintenance (3 units).**  
Course enables the individual to acquire the knowledge and skills in the maintenance and care of 8mm and 16mm film projectors and videotape systems.

**AV 203 Projector Equipment Maintenance (3 units).**  
Course enables the individual to attain basic knowledge and skills in the maintenance and care of slide and filmstrip projectors, as well as overhead and opaque projectors.

**AV 204 Transcription Equipment Maintenance (3 units).**  
Course enables the student to attain general knowledge and skills in the operation and maintenance of tape and disc recorders and record players.

**AV 205 Basic Acoustics and Optics (3 units).**  
An introduction to the theory and operation of sound and acoustical principles, their behavior, function and properties. Also covered is the field of optics, the principles and theory of operation as applied to both visual and mechanical means.

## **MESA COLLEGE**

Grand Junction, Colorado 81501

### **Contact:**

**Charles R. Hendrickson**  
Director of Audio Visual Services

Mesa College is a public, two-year college serving both residential and day students. It has an enrollment of approximately 3,000 in its day and evening courses, and is accredited by the North Central Association of Colleges and Secondary Schools. A range of college transfer and adult continuing education programs are offered. Its catalog also emphasizes the college's increased attention in recent years to programs of vocational and technical education for students who do not plan to complete a four-year degree program.

Mesa College offers two-year Associate in Applied Science degree programs for the training of Audio Visual Technicians and Graphics Communications Technicians.

### CORE CURRICULUM

**FIRST YEAR**

*Fall Quarter*

Eng. 11 English Composition	3	
AVIS 11 Graphic Arts I	3	
AVIS 13 Graphic Arts III	3	
AVIS 15 Intro. to Educational Media	3	
Bus. 43 Business Math	4	
Physical Education	1	
	17	

*Winter Quarter*

Eng. 12 English Composition	3	
GRCO 75 Commercial Design & Layout	3	
PSCI 22 General Psychology or SOCS 11 Intro. to Sociology	3	
SOCS 52 Intro. to Economics	3	
Art (Elective)	3	
Physical Education	1	
	16	

*Spring Quarter*

Eng. 15 Technical Report Writing	3	
Bus. 14 Human Relations	3	
AVIS 12 Practice & Problems in Materials Production	3	
AVIS 51 Still Photography	3	
Elective	3	
Physical Education	1	
	16	

### AUDIO VISUAL OPTION

**SECOND YEAR**

*Fall Quarter*

PSCI 14 Basic Electronics for Audio Visual	3	
PSCI 12 Acoustics & Optics	3	
AVIS 16 Sound Application	3	
AVIS 54 Organization of Instructional Materials	3	
EDUC 51 Intro. to Education	3	
	15	

*Winter Quarter*

PSCI 15 Electronics for AV	3	
AVIS 52 Advanced Production II	3	
AVIS 55 Organization of Instructional Material II	3	
AVIS 57 Projection Equipment Maintenance	4	
Elective	3	
	16	

*Spring Quarter*

AVIS 58 Transcription Equipment Maintenance	5	
AVIS 53 Advanced Production III	5	
AVIS 56 Field Practice Seminar	3	
Elective	3	
	16	

## GRAPHIC COMMUNICATIONS OPTION

### SECOND YEAR

#### *Fall Quarter*

GRCO 70 Darkroom Procedures	3
GRCO 71 Cold Type Composition & Paste Up I	3
GRCO 73 Duplicating Offset I	3
Art (Elective)	2
Eng. 31 Intro. to Journalism	3
Elective	3
	17

#### *Winter Quarter*

Bus. 27 Advertising	3
GRCO 72 Cold Type Composition & Paste Up II	3
GRCO 74 Duplication Offset II	3
GRCO 78 Newspaper Practices	3
GRCO 80 Printing Estimating	3
Elective	2
	17

#### *Spring Quarter*

GRCO 76 Photography for Photo Lithography	3
GRCO 77 Graphic Communication—Problems	3
GRCO 79 Printing Plant	3
Electives	6
	15

### COURSE DESCRIPTIONS

#### **AVIS 11 Graphic Arts I (3 units).**

This course is designed to develop competencies in the preparation of graphic materials.

#### **AVIS 12 Practices and Problems in Materials Production (3 units).**

An independent study course to provide direct experience for the audiovisual student in developing and producing finished projection materials.

#### **AVIS 13 Graphic Arts III (3 units).**

An introduction to graphic arts technology as related to the reproduction of various graphic design techniques; provides opportunity to develop basic skills in offset lithography, screen process, and relief printing.

#### **AVIS 15 Introduction to Educational Media (3 units).**

An introductory formal course in educational media designed to impart the philosophy, aims and content of the field. Emphasis is placed on the role of communications technology in education. Operation of equipment and production of materials is overviewed.

#### **AVIS 16 Sound Application (3 units).**

This course is designed to develop competencies in the recording of sound for use by teachers in classroom situations.

#### **AVIS 51 Advanced Production I—Still Photography (3 units).**

This course is designed to develop proficiencies in the production of still photographic materials which teachers can use in classroom situations.

**AVIS 52 Advanced Production II—Motion Picture Photography (3 units).**

This course is designed to develop proficiencies in the production of 8mm and 16mm motion picture materials which teachers can use for instructional purposes.

**AVIS 53 Advanced Production III (5 units).**

This course is designed to develop proficiencies in basic television production skills for use in both education and industry. Students will become involved with camera operation, studio lighting, set design, television direction, operation of videotape equipment, and other skills basic to television operation.

**AVIS 54 Organization of Instructional Materials I (3 units).**

This class will serve as a basic course in the techniques of procedural operation of an instructional materials center, a study of the methods of keeping records and data procedures, and basic in-service training techniques.

**AVIS 55 Organization of Instructional Materials II (3 units).**

A study of library techniques and procedures—both book and film, physical arrangements, and traffic patterns. Sources of equipment and materials will be researched and studied.

**AVIS 56 Field Practices Seminar (3 units).**

A course in which students are assigned to work in the public schools, colleges or other agencies and businesses as AV technicians. Arrangements will be made with necessary officials of willing agencies.

**AVIS 57 Projection Equipment Maintenance (4 units).**

A course in understanding the mechanical and electronic operation of tape recorders, record players, and other magnetic storage devices. The course covers repair, problem locating, and trouble shooting, and consists largely of applied laboratory.

**AVIS 58 Transcription Equipment Maintenance (5 units).**

A study of understanding the mechanical and electronic operation of tape recorders, record players, and other magnetic storage devices. The course covers repair, problem locating, and trouble shooting, and consists largely of applied laboratory.

**GRCO 70 Darkroom Procedures (3 units).**

A study of the darkroom, its equipment, and the functions therein. The chemistry of photography and film will be studied. The student will become proficient at processing film.

**GRCO 71 Cold Type Composition and Paste Up I (3 units).**

A basic study of cold type composing involving the use of various composing machines. Also includes development of paste up techniques, word spacing, type selection, use of white space, and machine proficiency. Lab required.

**GRCO 72 Cold Type Composition and Paste Up II (3 units).**

A more advanced study of cold type composition and paste up. Skills are developed in multiple form work, and more complicated techniques are developed. Lab required.

**GRCO 73 Duplicating—Offset I (3 units).**

Methods of printing and duplicating are introduced. Principles of offset duplicating are explained and practiced.

**GRCO 74 Duplicating—Offset II (3 units).**  
Various machines are explained and skills are practiced. Long runs, color, and quality copy are produced.

**GRCO 75 Commercial Design and Layout (3 units).**  
A lecture and laboratory course in fundamental principles and techniques using a variety of both black-and-white and color media. Pattern and design concepts are studied.

**GRCO 76 Photography for Photo Lithography and Platemaking (3 units).**  
Various techniques of camera, platemaking and darkroom work are developed. Also includes various methods of screening, masking and color separation. Lab required.

**GRCO 77 Graphic Communications Problems (3 units).**  
All skills developed by the student to produce work and solve problems that occur in the graphic arts field are practiced. This course is designed to develop the student's ability to deal with various situations on his own. Lab only.

**GRCO 78 Newspaper Practice (2 units).**  
A study of the technical problems and techniques involved in the production of newspapers.

**GRCO 79 Printing Plant Management (3 units).**  
A study of management techniques needed for printing, dealing with problems of work flow, overtime, rush orders, etc.

**GRCO 80 Printing Estimating (3 units).**  
A study of costs and cost estimating techniques dealing specifically with the printing industry.

**HILLSBOROUGH COMMUNITY COLLEGE**  
Tampa, Florida

Contact:  
William R. Tripp, Dean  
Career Programs

Hillsborough Community College was established and currently is committed to operate as a public, comprehensive, two-year institution which offers educational opportunities beyond the high school level. One of the college's primary concerns is to provide educational programs which will help each student acquire the common knowledge, skills, and attitudes which are necessary to function effectively as a citizen in a free society.

As a result of the communication explosion in the world today, there is an urgent need for specialists trained in mass media. As media hardware becomes universally used, the demand will dramatically increase. The Audio-Visual Media Technology program at Hillsborough is designed to provide the necessary training for entry level into jobs such as audiovisual technician, audiovisual specialist, television studio cameraman, and tele-

vision studio supervisor. Successful completion of this program leads to an Associate in Science degree.

### AUDIO-VISUAL MEDIA TECHNOLOGY PROGRAM

**FIRST YEAR**

*Term I*

HE 100 or HC 100 Humanities & Communications	3	
IM 100 Media Technology	3	
LB 100 Natural Science & Math	3	
SP 101 Social Science	3	
	12	

*Term II*

HE 100.1 or HC 100.1 Humanities & Communications	3	
IM 101 Media Logistics Practicum	4	
YM 110 or YM 100 Natural Science & Math	3	
Elective	3	
	13	

*Term III*

BE 100 Elementary Typing	3	
IM 103 Identification & Skills: Non-Book Materials	3	
SD 100 Intro. to Education	3	
SS 100 Social Science	3	
	12	

**SECOND YEAR**

*Term I*

IM 105 Graphic Arts I	4	
IM 108 Sound Applications	3	
Elective	3	
	10	

*Term II*

IM 110 Photography I Practicum	4	
IM 114 Television Production I Practicum	4	
Elective	2	
	10	

*Term III*

IM 115 Television Production II Practicum	4	
IM 120 Production Equipment Maintenance	3	
	7	

**COURSE DESCRIPTIONS**

**IM 100 Media Technology (3 units).**

This is an introductory course to media. It concerns the identification of available educational and communications media, emphasizing the basic skills, proper use, and function of media in education, industry and public service. Criteria for evaluation and selection of media for proper usage will be examined. Theories, principles and techniques of librarianship will also be studied.

**IM 101 Media Logistics Practicum (4 units).**

This course examines the supportive services of media in the media center or distribution areas. The tasks to be examined are acquisition, storage, supply, and maintenance support to the appropriate operations and management of media. Students will learn the following tasks in media logistics: classifying media, cataloging, record keeping, storing, assembling, scheduling, distributing, maintaining, demonstrating, and operating.

**IM 103 Identification and Skills: Non-Book Materials (3 units).**

This course deals with the vast array of non-book materials in the media field. Emphasis will be placed on proper selection and usage of non-book materials in education, industry and public institutions. It will also survey the visual communications field.

**IM 105 Graphic Arts I (4 units).**

This course is designed to develop competencies in preparation of graphic materials.

**IM 108 Sound Applications (3 units).**

This course examines audio forms of media. Students will develop skills in operation of audio media and competencies in various uses of sound production.

**IM 110 Photographic I Practicum (4 units).**

This course is designed to develop competencies in the production of still photographic materials and 8mm and 16mm motion picture materials.

**IM 114 Television Production I Practicum (4 units).**

This course is designed to develop proficiencies in basic television production skills for use in both education and industry. Students will learn camera operation, studio lighting, set design, television direction, operation of videotape equipment, and other basic skills of television operation.

**IM 115 Television Production II Practicum (4 units).**

This is a continuation of IM 114. A course project is required.

**IM 120 Production Equipment Maintenance (3 units).**

This course includes examining and gaining basic skills in the mechanical and electronic operation of projection equipment. Repair and maintenance problems will also be covered.

**COLLEGE OF DUPAGE**

Glen Ellyn, Illinois

**Contact:**

Carter D. Carroll, Coordinator  
Media Consultant Program

The College of DuPage is a two-year community college with an enrollment of approximately 8,000 students. In the spring of 1970, the college initiated a two-year Associate in Applied Science degree program for the training of Media Consultants.

The program is designed to provide students with a knowledge of the arts and skills of media for use in the non-broadcast areas of education, medicine, government, industry, and commerce. Each student is given 45 quarter hours in media, and 25 hours in a special area of related study.

## MEDIA CONSULTANT PROGRAM

### FIRST YEAR

#### *First Quarter*

English 101	3
Specialty	5
Media 100 History of Communications	4
Media 110 Media Technology	3
Media 112 Media Application	3
	18

#### *Second Quarter*

English 102	3
Specialty	5
Media 120 Media Design & Production	4
Media 130 Principles of Sound & Audio Production	4
	16

#### *Third Quarter*

English 103	3
Specialty	5
Speech 100	5
Photography 100	5
Media 199 Audio Practicum	
	18

### SECOND YEAR

#### *First Quarter*

Speech 110	5
Specialty	5
Photography 103	5
Media 201 Television Production	3
Media 299 Television Practicum	
	18

#### *Second Quarter*

Speech 120 or Elective	5
Specialty	5
Media 202 Television Production	3
Media 210 Cinematography	3
Media 230 Media Presentation I	2
Media 298 Film Practicum	
	18

#### *Third Quarter*

Theatre 200	5
Specialty	5
Elective or Political Science	3-5
Media 212 Cinematography	3
Media 232 Media Presentation II	
	18

### COURSE DESCRIPTIONS

#### **Media 100 History of Communications (4 units).**

Historical account of man's efforts at communication. Emphasis will be given to the consequences of the Industrial Revolution on communications and the technological advances made in the field since the inventions of Edison.

#### **Media 110 Media Technology (3 units).**

The study of mediaware and the technology employed in the communicative process.

#### **Media 112 Media Application (3 units).**

The appropriateness of media in solving communication problems and the unique limitations of each medium. Media will be designed, selected and prepared for use.

#### **Media 120 Media Design and Production (4 units).**

Development of audiovisual materials for presentations. Production techniques will be studied in the preparation of projected and non-projected materials.

**Media 130 Principles of Sound and Audio Production (4 units).**  
The technology of sound recording and production. The course will entail knowledge in basic principles of sound waves, microphones, amplifiers, magnetic recordings, and recording equipment.

**Media 199 Audio Practicum.**  
Individual and small group audio production sessions held weekly under professional direction and supervision.

**Media 201 Television Production (3 units).**  
A study of the mechanics and techniques of television production as applied to the non-broadcast areas of endeavor.

**Media 299 Television Practicum.**  
Individual and small group television production sessions under professional direction and supervision.

**Media 202 Television Production (3 units).**  
Aesthetics of television production as applied to non-broadcast uses.

**Media 210 Cinematography (3 units).**  
Introduction to filmmaking with actual film production in 16mm and 8mm formats. Equipment, films, composition, lighting, and editing.

**Media 298 Film Practicum.**  
Individual and small group film production sessions held under professional direction.

**Media 230 Media Presentation I (2 units).**  
Media production and problem solving. Required productions are designed to meet the demands of the student's intended area of employment. Productions are directed to communicate knowledge to small audiences.

**Media 212 Cinematography (3 units).**  
Advanced work in lighting, filming and editing. An introduction to syn-sound and special effects with a final project being a syn-sound film clip.

**Media 232 Media Presentation II.**  
Media production and problem solving. Required productions are designed to meet the demands of the individual's intended area of employment. Productions are directed to communicate knowledge to large audiences.

**THORNTON COMMUNITY COLLEGE**  
Harvey, Illinois 60426

Contact:  
Blake L. Reed  
Educational Media Specialist

Thornton Community College is a two-year, public college with a total enrollment of approximately 8,000 students. It is accredited by the North Central Association of Colleges and Secondary Schools.

In 1969, Thornton initiated a program to train Educational Media Technicians. This program is offered both as a two-year program leading to an Associate degree and as an accelerated, three-semester program leading to an Educational Media Certificate.

**EDUCATIONAL MEDIA TECHNOLOGY CERTIFICATE PROGRAM  
[Non-Degree]**

<i>First Semester</i>		<i>Second Semester</i>	
Ed Media 101 Intro. to Educational Media	2	Ed Media 103 Educational Media Systems	2
Ed Media 102 Educational Media Production Techniques	3	Ed Media 104 Principles of Multi-Media Presentation	3
Photo 101 Intro. to Photography	2	Graphics 101 Intro. to Graphic Arts	3
Art 111 Two-Dimensional Design	2	Ed Media 205 Special Techniques of Photography Production	2
Elective	3	Art 207 Advertising Design I	2
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	12		12
 <i>Third Semester</i>			
Ed Media 201 Television Production	3		
Ed Media 211 Practicum I—Supervised Practice	3		
Elec Tec 100 Intro. to Electronics	3		
Elective	3		
	-----		
	12		

**EDUCATIONAL MEDIA TECHNOLOGY PROGRAM  
[Degree]**

<b>FIRST YEAR</b>		<i>Second Semester</i>	
<i>First Semester</i>			
Ed Media 101 Intro. to Educational Media	2	Ed Media 103 Educational Media Systems	2
Ed Media 102 Educational Media Production Techniques	3	Ed Media 104 Principles of Multi-Media Presentation	3
Photo 102 Intro. to Photography	2	Ed Media 205 Special Techniques of Photographic Production	2
English 101 Composition & Rhetoric	3	Art 207 Advertising Design	2
Art 111 Two-Dimensional Design	2	Physical Education	1
Physical Education	1	English	3
Math or Science Elective	3-4	Electives	3
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	16-17		16
			39

**SECOND YEAR**

*Third Semester*

Ed Media 201 Television Production	3
Ed Media 211 Practicum I— Supervised Practice	3
Elec Tec 100 Intro. to Electronics or Phy Sci 101 Physical Science	3-4
Physical Education	1
Social or Behavioral Science Elective	3
Electives	3

*Fourth Semester*

Ed Media 212 Practicum II— Supervised Practice	3
Graphics 101 Intro. to Graphic Arts	3
Data Pr 101 Intro. to Data Processing	3
Speech 108 Fundamentals of Speech	3
Physical Education	1
Social or Behavioral Science	3

16-17

16

**COURSE DESCRIPTIONS**

**Ed Media 101 Introduction to Educational Media (2 units).**

Rationale and role of media technicians in various employment situations; audiovisual equipment operation; simple maintenance techniques including film and magnetic tape splicing; nature of and usage of audiovisual instructional media; and nature of mediated instruction.

**Ed Media 102 Educational Media Production Techniques (3 units).**

Techniques involved in production of instructional displays and media, including dry mounting, laminating, simple lettering techniques, mechanical lettering, spray paint lettering, charts, posters, production of overhead transparencies.

**Ed Media 103 Educational Media Systems (2 units).**

Multi-media systems, audio-tutorial systems, language and learning laboratories, television, dial-access systems, problems of media production, and integration into systems. Procedural and technical details involved in production, scheduling and distribution of educational media. Computerized instruction, programmed instruction.

**Ed Media 104 Principles of Multi-Media Presentations (3 units).**

Principles and techniques involved in production of television, etc. Student preparation of projects involving four or more media studied in Introduction to Media, Educational Media Systems, and Educational Media Production Techniques. Students to present projects in class for group critique.

**Ed Media 201 Television Production (3 units).**

Television cameras, audio, lighting, scenery, properties, graphics, special effects, video-tape recording. Student practicum in various roles involved in television production and control room, including cameraman, floor director, technical director, audio director, video director, and producer-director.

**Ed Media 205 Special Techniques of Photography Production (2 units).**

Camera copy techniques (close-up photography), producing 35mm slides (titling, legibility standards, slide duplication, originating art work for slides). Producing film-strips (from artwork, pictures and 35mm slides). Cinematography (production of 8mm films).

**Ed Media 211 Practicum I (3 units).**

Work experience of six hours per week in an area school, business, industry, or govern-

mental agency. The practicum work will be coordinated through a weekly seminar of one hour.

**Ed Media 212 Practicum II (3 units).**  
Work experience of six hours per week in a supervised setting. The practicum will be coordinated through a weekly seminar one hour in length.

**SOUTHWESTERN COMMUNITY COLLEGE**  
Creston, Iowa 50801

Contact:  
Arnold H. Maner, Director  
Career Education

Southwestern Community College was organized in 1966 as one of the 16 area community colleges in the state of Iowa. The college exists in response to educational needs in the area it serves by offering educational opportunities to all individuals who desire a more meaningful life. A vital part of the school's philosophy is the conscious effort to stimulate interest in self-fulfillment by helping students to identify and satisfy their needs.

During its first years of operation, a number of career education programs have been developed and implemented. Among these programs is one to train Educational Media Technicians.

**EDUCATIONAL MEDIA TECHNOLOGY PROGRAM**

FIRST YEAR		<i>Second Semester</i>	
<i>First Semester</i>			
Intro. to Instructional Media	3	AV Maintenance	2
Audio	3	Graphics II	5
Graphics I	4	Still Photography	5
AV Equipment Operation	3	Library, Technical Services	4
Intro. to Library	3	Related Instruction	2
Related Instruction	2		<hr/>
	<hr/>		18
	18		

**SECOND YEAR**

*Third Semester*

Motion Media—Television & Motion Photography	4
Media & Schools	5
Elective	3
Library, Public Services	4
Related Instruction	2

*Fourth Semester*

Coordination of Media	5
Elective	3
Related Instruction	2
Internship	8
	<hr/>
	18

18

**COURSE DESCRIPTIONS**

**Introduction to Instructional Media (3 units).**

A history and overview of the utilization of media in instruction with discussion of job requirements and opportunities. Emphasis will be on orientation of the student to the media field and the characteristics of each medium.

**Audio (3 units).**

Intended to develop student capability to operate recording, public address, and other sound equipment. Setting up and operating microphones, mixers and tape recorders; editing tapes; mixing narration, music and sound effects. Emphasis will be placed on scripting and recording from scripts.

**Graphics I (4 units).**

Aims to develop the students' ability to follow written or oral directions to produce graphic displays. Dry mounting procedures, lettering techniques, design principles, composition, and graphic display production will be stressed.

**Audiovisual Equipment Operation (3 units).**

Deals with setting up, operating, and taking down of common media equipment. Motion picture projectors, filmstrip projectors, overhead projectors, opaque projectors, and multi-projection equipment will be included.

**Introduction to Library (3 units).**

An introduction to library services. Basic philosophy, procedures, tools, and techniques for library routines will be emphasized.

**Motion Media—Television and Motion Photography (4 units).**

An exploration of the motion media, their utilization, characteristics and equipment. Planning and scripting procedures, shooting, editing, and playback techniques will be emphasized. Operational production using CCTV, portable TV, studio TV, and 8mm motion camera gear will be part of instructional activities.

**Media and the Schools (5 units).**

Practical application of media in the schools. Stress is on media for instruction. This course gives background for field experience and provides lab time for the field experience.

**Library, Public Services (4 units).**

Deals with circulation control systems and location of information through catalogs, indexes and basic reference books. Includes clerical procedures in circulation control

systems in various types of libraries, as well as basic reference materials designed to prepare students to assist patrons in the use of library tools.

**Coordination of Educational Media (5 units).**

Deals with scheduling of materials and equipment, taking inventory, keeping of purchase records and accounts, filing of materials, mailing and shipping of materials, ordering materials, and scheduling of meetings and appointments. Includes supervising and scheduling techniques for clerical personnel and student assistants.

**Internship (8 units).**

Assignment for work in educational media technology at specified locations off campus. On-the-job training in an actual work situation supervised by professionals within the assignment center. Seminar sessions are also held.

**RICHMOND COMMUNITY COLLEGE**

Richmond, Kentucky 40475

**Contact:**

Kenneth Clawson, Dean

Richmond Community College is one of six colleges of Eastern Kentucky University, a coeducational institution accredited by the Southern Association of Colleges and Schools.

In the fall of 1969 a new curriculum in Instructional Media Technology was initiated in the College of Applied Arts and Technology. This is a two-year program leading to an Associate of Arts degree. It is an inter-disciplinary program drawing on several colleges and departments of the university. It combines practical work in art and drawing with technical knowledge of instructional media. A highlight of the program is the opportunity to gain first-hand experience through practicums in instructional media and equipment, and a summer internship in instructional media. Job opportunities will be found with commercial and educational TV stations, school systems, college media centers, etc.

**INSTRUCTIONAL MEDIA TECHNOLOGY PROGRAM**

**FIRST YEAR**

*First Semester*

ART 117 Drawing & Design	3
ESH 125 Instructional Media Fundamentals I	3
GSE 101 English Composition	3
GSO 100 Orientation	1
GSP 180 Physical Education	1

*Second Semester*

General Education Elective	3
GSE 102 English Composition	3
GSP 181 Physical Education	1
INT 205 Industrial Illustration I	3
INT 220c Practicum in Instructional Media Materials	3

INT 191 Technical Drawing I	3	MIL 102 Basic Military Training or Elective	2
MIL 101 Intro. to Military Science or Elective	2	SPE 290 Intro. to Radio & Television	3
	<hr/> 16		<hr/> 18

*Summer Term*

INT 225b Internship in Instructional Media	2-4
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**SECOND YEAR**

*First Semester*

ART 317 Lettering & Poster Design or ART 321 Drawing & Illustration	3
EDF 202 Professional Orientation	3
ESH 126 Instructional Media Fundamentals II	3
INT 351 Fundamentals of Applied Electricity	3
MIL 201 Second Year Basic Military Training or Elective	2
SPE 395 Television Production	3
	<hr/> 17

*Second Semester*

General Education Elective	3
INT 220d Practicum in Instructional Media Equipment	3
INT 311 Graphic Arts I	3
INT 315 Photography I	3
INT 353 Intro. to Electronics	3
MIL 202 Second Year Basic Military Training or Elective	2
	<hr/> 17

**COURSE DESCRIPTIONS**

**INT 191 Technical Drawing I (3 units).**

Basic technical drawing involving sketching, lettering, orthographic projection, pictorial representation, drafting techniques, tracing, and reproduction of drawings.

**INT 205 Industrial Illustration I (3 units).**

Axonometric projection—*isometric, dimetric and trimetric*; *oblique, pseudo representations and perspectives*; commercial and technical illustration.

**INT 220c Practicum in Instructional Media Materials (3 units).**

Supervised practical experiences in the design and preparation of instructional devices; includes slides, maps, charts, graphs, diagrams, models, dioramas, and transparencies; local production techniques and equipment.

**INT 220d Practicum in Instructional Media Equipment (3 units).**

Supervised practical experiences in the selection, installation and maintenance of instructional media equipment; preparation of bid specifications; minor repairs and preventive maintenance.

**INT 225b Internship in Instructional Media (2-4 units).**

Coordinated and supervised work experience in instructional media design and fabrication; arranged in approved university facilities or commercial establishments. Credit varies with hours of employment.

**INT 311 Graphic Arts I (3 units).**

General graphic arts with emphasis on hand composition, elementary presswork, silk screen principles, linoleum block printing, and bookbinding.

**INT 315 Photography (3 units).**

Picture composition; film developing, printing, enlarging, dodging; contact printing; photo finishing; study of and care for equipment and materials; visual instruction; planning of facilities.

**INT 351 Fundamentals of Applied Electricity (3 units).**

Principles of static and current electricity; measures of electricity; heat, light and power applied to the planning and construction of electrical installations.

**INT 353 Introduction to Electronics (3 units).**

Fundamentals of vacuum tubes; semiconductor devices; AM radio receivers and servicing techniques.

**ESH 125 Instructional Media Fundamentals (3 units).**

Overview of the instructional media field; sources, selection and cataloging; design principles applicable to instructional media; individual operation and utilization.

**ESH 126 Instructional Media Fundamentals II (3 units).**

A continuation of ESH 125 with emphasis on the fundamentals of dial-access systems, language laboratories, computer-assisted instruction, and programmed instruction; environmental factors affecting media utilization; reports and record keeping.

**ANNE ARUNDEL COMMUNITY COLLEGE**

Arnold, Maryland 21012

**Contact:**

James Privatera, Director  
Multi-Media Technology

Anne Arundel Community College is a two-year institution with an enrollment of approximately 4,000. It is accredited by the Middle States Association of Colleges and Secondary Schools.

Students in the Multi-Media Technician program at Anne Arundel are prepared for employment in both industrial and educational settings. Opportunities exist in sales, sales training, in-plant training, advertising, and illustration. Educational institutions have a rapidly expanding need for multi-media technicians to aid in instruction and presentation. The program was established in 1967, and leads to an Associate in Arts degree.

**MULTI-MEDIA TECHNOLOGY PROGRAM**

**FIRST YEAR**

*First Semester*

English 111 Composition & Intro. to  
Literature I

3

*Second Semester*

English 112 Composition & Intro. to  
Literature II

3

Speech 111 Fundamentals of Speech	3	Art 122 Fundamentals of Design	3
Multi-Media 111 Media Materials & Processes I	4	Sec. Science 111 Elementary Typewriting	3
Multi-Media 121 Photography I	3	Multi-Media 112 Media Materials & Processes II	4
Multi-Media 113 Intro. to Graphics	3	Multi-Media 122 Photography II	3
Phys. Ed. Physical Activities	1	Phys. Ed. Physical Activities	1
	<hr/> 17		<hr/> 17

## SECOND YEAR

### First Semester

Multi-Media 204 Basic Film Making	3
Multi-Media 211 Beginning Television	3
Psych. 111 Intro. to Psychology	3
Psych. 231 Human Relations	3
Phys. Ed. Physical Activities	1
Electives	4
	<hr/> 17

### Second Semester

Multi-Media 222 Television Methods	3
Multi-Media 232 Media Administration	3
Multi-Media 242 Multi-Media Projects	4
Multi-Media 261 Art Layout & Photography for Reproduction	3
Phys. Ed. Physical Activities	1
Electives	3
	<hr/> 17

## COURSE DESCRIPTIONS

### MM 111 Media Materials and Processes I (4 units).

An introduction to the history and development of printing, the theory and practice of duplicating and printing methods (spirit duplication, stencil duplication, whiteprint, diazo, offset printing, etc.) necessary in today's business and industry.

### MM 112 Media Materials and Processes II (4 units).

A study of auditory communication; the theory of sound and acoustics; the use of auditory methods such as the lecture, the transmission of sound on radio, phonorecording, and audiotape; the practice of recording; the use of amplifiers and preamplifiers and electronic circuitry; the synchronization of sound to the visual processes: preparation of audio programming.

### MM 121 Photography I (3 units).

An introduction to black-and-white photography and its processes, including parts of a camera, darkroom techniques, picture taking, aesthetic appreciation of good photography; accessories as tools of the professional photographer. Students are required to provide their own camera, photographic film, and sensitized paper.

### MM 122 Photography II (3 units).

A study of the relationship of photography to other audio and visual processes; the history of photography; color materials and processes used today; application of color photography in today's industry. Students are required to provide their own camera, photographic film, and other accessories.

### MM 211 Beginning Television (3 units).

The theory of open- and closed-circuit television methods; the understanding of equipment used in television programming; studio design; adaptation of video methods to industrial usage.

**MM 222 Television Methods (3 units).**

Actual television program production to apply video techniques, script writing, and directing; micro-projection for television and adapting other audio and visual processes to the television screen. Properties and special effects, sets, and backgrounds are produced in actual student presentations.

**MM 232 Media Administration (3 units).**

The functions and responsibilities of the media specialist in an industrial or educational audiovisual department; business procedures in ordering, inventorying, maintenance, and budgeting for a media operation. Responsibilities and opportunities for media specialists are surveyed. Media facilities are designed and equipment evaluated. Legal aspects of media production involving copyright are discussed.

**MM 242 Multi-Media Projects (4 units).**

Student preparation of multi-media programs; evaluations of commercially produced audio and visual materials; demonstrations of effective audio and visual presentations of students; the multi-media approach in industry and education.

**MM 113 Introduction to Graphic Arts Production (3 units).**

A basic course in lettering techniques, design principles, typography, figure and cartoon drawing, graphs, maps, charts, and overall composition of non-projected materials. Students will provide themselves with a basic set of magic markers and lettering pens.

**MM 204 Basic Film Making (3 units).**

An introductory course to the fundamental techniques of camera use, production planning, indoor and outdoor shooting procedures. Emphasis will be on the creation of teaching and demonstration films, script outlining, and film editing. Students must provide their own film.

**GREENFIELD COMMUNITY COLLEGE**

Greenfield, Massachusetts 01301

**Contact:**

W. J. Thibeault

Greenfield Community College is one of 13 community colleges operating under the authority of the Massachusetts Board of Regional Community Colleges. It is accredited by the New England Association of Colleges and Secondary Schools. The college seeks to serve the educational, occupational and cultural needs of the community around it by providing high quality education opportunities at low cost.

The Media Technology curriculum is designed for those with an interest in audiovisual communication, or for persons currently employed by institutions involved with the dissemination of information or with training. Students completing the program should be prepared for positions as media technicians for educational institutions, business, and industry, and should be able to continue their education in the field of media beyond the Associate degree level.

## MEDIA TECHNOLOGY PROGRAM

### FIRST YEAR

#### *First Semester*

English Composition I	3
PSY 101 Principles of Psychology	3
Liberal Arts Elective	3
AVM 101 Intro. to Audiovisual Media	3
ART 171 Graphic Design I	3
	15

#### *Second Semester*

English Composition II	3
SOC 101 Principles of Sociology	3
Liberal Arts Elective	3
AVM 205 Photography & Graphics in Education	3
PSY 211 Psychology of Education	3
	15

### SECOND YEAR

#### *First Semester*

PHY 105 Introductory Electronics	4
SPE 101 Oral Communications	3
LIB 101 Information Sources & Materials	3
AVM 201 Technology in Education	3
AVM 103 Production of Audiovisual Materials	3
	16

#### *Second Semester*

ENG 123 Advanced Report Writing	3
Liberal Arts Elective	3
AVM 203 Intro. to Educational Broadcasting	3
AVM 217 Media Systems Design	6
	15

### COURSE DESCRIPTIONS

#### **AVM 101 Introduction to Audiovisual Media (3 units).**

Characteristics, applications and implications of media. Emphasis on operation of equipment and use of related materials. Laboratory required.

#### **AVM 103 Production of Audiovisual Materials (3 units).**

Production of graphic materials, still pictures, transparencies, audiotapes, motion pictures, and videotapes. Laboratory required.

#### **AVM 111 Audio Workshop (3 units).**

Theory and practices of audio materials production. Writing audio programs for tapes, records and radio.

#### **AVM 201 Technology in Education (3 units).**

Systems approach to education, including individualized instruction, programmed instruction, and computer-assisted instruction.

#### **AVM 203 Introduction to Educational Broadcasting (3 units).**

Basic television and radio production. An introduction to portable videotape units and work in radio programming.

#### **AVM 205 Photography and Graphics in Education (3 units).**

Photography and graphics used in the production of slides, filmstrips, and single concept motion picture films for use by education, business and industry.

**AVM 215 Audiovisual Technology (3 units).**

Theory and practice in the electronics related to media. Maintenance and care of equipment.

**AVM 207 Educational Technology (3 units).**

Basic television production. Creative processes involved in giving videographic forms to simple program ideas. Studio and control room operations and practice.

**AVM 217 Media Systems Design (6 units).**

Problems in the design of media facilities, distribution and retrieval systems, maintenance, purchase of equipment and materials, in-service education.

**MACOMB COUNTY COMMUNITY COLLEGE**

Center Campus  
Mount Clemens, Michigan

**Contact:**

Thomas Dixon, Coordinator  
Audio-Visual Resources

Macomb County Community College is a comprehensive, multi-campus, two-year public institution with an enrollment of more than 17,000 students. In 1969, the Center Campus initiated a one-year certificate degree program to train Audio-Visual Technicians. The program provides students with a basic knowledge of equipment use and maintenance, and preparation and use of audiovisual materials.

**AUDIO-VISUAL TECHNICIAN PROGRAM**

*First Semester*

AVT 110 Intro. to AV Materials & Equipment	3
AVT 120 (GCA 104) Graphic Arts for Audio-Visual	3
AVT 140 Intro. to Closed-Circuit TV & Video Tape Equipment	3
AVT 160 Audio Tape & Recorders	3
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	15

*Second Semester*

AVT 121 Audio-Visual Management	3
AVT 131 Advanced Still & Motion Picture Photography	3
AVT 141 Directed Study	2
AVT 151 Television Programming & Studio Operation	3
AVT 161 Audio-Visual Internship	3
AVT 171 Audio-Visual Mechanics & Control	3
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17

**COURSE DESCRIPTIONS**

**AVT 110 Introduction to Audio-Visual Materials and Equipment (3 units).**

The student will be introduced to audiovisual materials including 8mm and 16mm

motion picture film, audio and videotape, slides, filmstrips, transparencies, and opaque materials. The operation and preventive maintenance of the equipment will be covered.

**AVT 120 Graphic Arts for Audio-Visual (3 units).**

Emphasis in this course will be on creating charts, graphs, and posters—including design techniques, materials used, various graphics techniques, and maintenance of graphics equipment.

**AVT 121 Audio-Visual Management (3 units).**

Includes business procedures in the ordering of films, software, inventory of parts, and purchase requisitions.

**AVT 130 Still Photography in Audio-Visual (3 units).**

Basic still photography and developing will be discussed, followed by laboratory sessions in which the student will expose, develop and print from black-and-white film. Natural and artificial light conditions, exposure meters, and electronic flash units will be studied.

**AVT 131 Advanced Still and Motion Picture Photography (3 units).**

Covers shooting and editing of 16mm and Super 8mm motion picture film, still and color processing, and printing.

**AVT 140 Introduction to Closed-Circuit Television and Video Tape Equipment (3 units).**

This course deals with various types of cameras for studio and remote use; video switching, fading, and special effects equipment; studio program operation; basic lighting and lighting effects; scripting; distribution systems; videotape format and equipment; and preventive maintenance procedures.

**AVT 141 Directed Study (2 units).**

This course is held on an individual basis. Students will be assigned college AV projects such as slide copy work, still photography, creation of artwork for the camera, or making transparencies.

**AVT 151 Television Programming and Studio Operation (3 units).**

A seminar course where the student will be involved in television productions and videotaping sessions.

**AVT 160 Audio Tape and Recorders (2 units).**

A working knowledge of audiotape and recorders will be the goal of this course. The student will learn the basic principles of tape recording and how to operate and preventively maintain various types of monophonic and stereophonic recorders, both in the reel-to-reel and cassette formats. Recording and playback procedures, editing, and duplication will also be covered. Synchronization of audiotape to video information for large group showings as well as repetitive projection displays will be considered.

**AVT 171 Audio-Visual Mechanics and Control (3 units).**

Identification of film format; its cleaning and repair; projection layout and screen placement for various situations; public address systems and sound control; dial-access and video distribution systems; repair of all audiovisual equipment.

**OAKLAND COMMUNITY COLLEGE**  
 Bloomfield Hills, Michigan 48013

Contact:  
 David A. Doidge, Specialist  
 Educational Media

Oakland Community College offers an Associate in Applied Science degree for a two-year program in Audio-Visual Technology. The program prepares students for employment in libraries, schools, colleges, business, and industry. Upon completion of the program, students are prepared to operate and repair various audiovisual machines, design and produce visual media, and prepare technical papers. Students receive, in addition, a background in photography, videotape techniques, lettering and layout, data processing, and electronics.

**AUDIO-VISUAL TECHNOLOGY PROGRAM**

**FIRST YEAR**

*First Session*

AVM 101 Intro. to Audiovisual Materials & Equipment	3
AVM 122 Fundamentals of Photography	3
FSC 150 Foundations of Communications	4
MAT 121 Technical Mathematics I	3
	<hr/>
	13

*Second Session*

ART 103 Lettering & Layout	3
ELT 101 Applied Electricity	3
ENG 134 Technical Communications	7
FSN 150 Foundations of Natural & Life Sciences	4
Elective	3
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	16

*Spring or Summer Session*

AVM 202 Audiovisual Material Production	3
POL 151 American Government	3
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	6

**SECOND YEAR**

*Third Session*

AVM 221 Photographic Production	3
DPR 101 Principles of Data Processing	3
ELT 102 Applied Electronics	3
FSS 150 Foundations of Behavioral & Social Sciences	4
Elective	3
	<hr/>
	16

*Fourth Session*

AVM 211 Field Project	3
ENG 211 Technical Writing	3
FSH 150 Foundations of Humanities	4
Elective	3
	<hr/>
	13

## **COURSE DESCRIPTIONS**

### **AVM 101 Introduction to Audiovisual Materials and Equipment (3 units).**

The student will identify the characteristics of different types of AV materials and AV equipment as they are used in instructional situations; operate 8mm, 16mm and 35mm projectors, opaque and overhead projectors, tape recorders, phonographs, and other equipment; and will perform simple maintenance functions, including lubrication, cleaning of parts, changing of lamps and belts, and making minor mechanical and structural adjustments when necessary.

### **AVM 122 Fundamentals of Photography (3 units).**

The student will operate competently a 35mm camera, and will identify the functions and characteristics of the various parts of such equipment. Finished enlargements of various sizes will be produced. Students will be instructed in making allowances for defective or incorrectly exposed negatives.

### **AVM 202 Audiovisual Material Production (3 units).**

The student will produce, from verbal descriptions and rough sketches, finished materials that are used with audiovisual equipment.

### **AVM 211 Field Project (3 units).**

The student will work part time in a public school, college, hospital, or industrial audiovisual resource center. Supervisory duties will be performed, and interpretive reports will be prepared.

### **AVM 212 Advanced Field Project (3 units).**

The student will work part time in a public school, college, hospital, or industrial audiovisual resource center. Supervisory duties will be performed, and interpretive reports will be prepared.

### **AVM 221 Photographic Production (3 units).**

The student will produce correctly exposed 35mm slides and filmstrips in color or black and white, utilizing actual objects and artwork on the copy stand. Operation of the 8mm film camera will be covered, and the student will produce 8mm single concept films and full length 8mm films with magnetic soundtracks. Eight, 16 and 35mm splicing and editing equipment will be studied.

## **LAKWOOD STATE JUNIOR COLLEGE**

White Bear Lake, Minnesota 55110

Contact:

Edward Payne

## **COURSE DESCRIPTIONS**

### **COMMUNICATIONS TECHNOLOGY OPTION**

#### **ComT 101 Psychology of Communications (3 units).**

Philosophy and aims of educational media are studied; theories and research studies of visual and audio communications are reviewed; selection of appropriate media is practiced.

**ComT 102 Visual Design (3 units).**

Principles of design and visual perception patterns are studied. Comparison is made of design elements for various media. Lettering, layout and design of two- and three-dimensional forms is performed.

**ComT 103 Photography (3 units).**

The effects of static and motion picture films on learning are studied. A laboratory experience in outlining, storyboarding and shooting a series is provided. Basic exposure and developing procedures are practiced, including the use of various cameras, meters, calculators, enlargers, printers, and films.

**MEDIA OPTION**

**ComT 114 Sources of Materials (3 units).**

The basic references and bibliographic sources in a library are studied. Applied experiences include the basic steps in the collation of listings in print and non-print materials by various parameters including subject field, age range, style of medium, *etc.*

**ComT 124 Selection and Preparation of Media Materials (3 units).**

Procedures for identifying proper communications media are studied. Laboratory experience includes production of motion and still films, slides, transparencies, mounted and laminated photographs, and audiotapes.

**ComT 125 Media Equipment Operation (3 units).**

The operation of audiovisual presentation equipment is practiced. Most models of motion picture projectors; slide, transparency and opaque projectors; tape recording and sound amplification equipment are included.

**ComT 126 Media Equipment Maintenance (3 units).**

Trouble shooting routines for all basic equipment common to a materials center are studied. Practice is given in the use of test equipment such as volt-ohm meters, tube testers, and oscilloscopes. Methods for establishing preventive maintenance outlines are studied.

**ComT 132 Materials Center Administration (3 units).**

An introduction to the operation of a multi-media materials center. Includes the study of procedures for processing orders and acquisition, cataloging, and circulation of materials and equipment.

**ComT 133 Television (3 units).**

The production of a telecast is studied and experience is obtained in outlining, storyboarding, scripting, light, telecasting, and tape recording a telecast.

**ComT 134 Display (3 units).**

The principles of design and human perception patterns are studied. These principles are applied to the construction of two- and three-dimensional displays, including commercial sales displays, manufacturer's shows, and educational booths.

**ComT 222 Media Internship (6 units).**

The student interns at an off-campus media center.

**MERCER COUNTY COMMUNITY COLLEGE**  
Trenton, New Jersey 08608

Contact:  
C. Donald Weinberg, Director  
Instructional Media Center

Mercer County Community College offers both a one-year and a two-year program in Communications Media. The one-year program is intended to provide the student with specific technical skills in the areas of equipment operation, basic set-up and maintenance, and basic media production. Students completing this program earn a certificate of proficiency, and will be able to find employment as assistants in such areas as photography, television and educational media.

Students completing the two-year program will earn an Associate in Applied Science degree. The program is designed to provide them with critical, technical and production skills in the mass communications media. Particular emphasis is given to visual communications, such as photography, cinema and television.

**COMMUNICATIONS MEDIA PROGRAM**

[Certificate]

<i>First Semester</i>		<i>Second Semester</i>	
CM 101 Intro. to Communications Media	3	CM 108 Production of Still Photography Materials	3
AD 207 Photography	2	CM 112 Techniques & Theory of the Motion Picture	4
CM 223 Techniques of Radio Production & Sound Duplication	2	CM 228 Techniques of Television Production II	4
CM 227 Techniques of Television Production	4	AD 208 Advertising Photography	2
CM 105 Cinema	3	EE 135 Media Electronics	4
	14		17

**COMMUNICATIONS MEDIA PROGRAM**

[Degree]

<b>FIRST YEAR</b>			
<i>First Semester</i>		<i>Second Semester</i>	
EG 101 Language & Literature	3	EG 102 Language & Literature II	3
CM 105 Cinema	3	EE 135 Media Electronics	4
CM 101 Intro. to Communications Media	3	AD 208 Advertising Photography	2
AD 207 Photography	2	CM 112 Techniques & Theory of the Motion Picture	4
Health & Physical Education	1	Health & Physical Education	1
Science Elective	3	Science Elective	3
	15		17

**SECOND YEAR**

*Third Semester*

CM 227 Techniques of Television Production	4
PY 101 Intro. to Psychology	3
CM 223 Techniques of Radio Production & Sound Duplication	2
CM 108 Production of Still Photography Materials	3
Free Elective	3
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	15

*Fourth Semester*

CM 228 Techniques of Television Production	4
MA 109 Technical Mathematics	3
PY 201 Educational Psychology	3
Social Science Elective	3
Free Elective	3
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	16

**COURSE DESCRIPTIONS**

**CM 101 Introduction to Communications Media (3 units).**

Demonstrates the interrelationships of the various communications media. Introduction to the communication process; the structure and function of media in society. History, development and trends of mass communications media will be covered. Emphasis will be on the use and maintenance of basic equipment and materials.

**CM 105 Cinema (3 units).**

The film is examined both as a means of communication and as an art form. The course covers the relationship between cinematic techniques and film effectiveness and explores film as a social force.

**CM 108 Production of Still Photography Materials (3 units).**

A study of advanced darkroom techniques. Black-and-white printing and the production of color materials, such as negatives, positives and slides will be covered.

**CM 112 Techniques and Theory of the Motion Picture (4 units).**

Programming and production of the motion picture. The student will become familiar with 8mm and 16mm films, both sound and silent, with emphasis on the single concept film. Course work will include techniques of laboratory, studio and location.

**CM 223 Techniques of Radio Production and Sound Duplication (2 units).**

A study of sound recording and transmission techniques. Concentrates on studio work and operation of transmission consoles.

**CM 227 Techniques of Television Production I (4 units).**

Course work will concentrate on studio set-up with emphasis on lighting, sound and camera placement. Basic control work will also be covered.

**CM 228 Techniques of Television Production II (4 units).**

Advanced techniques of television production will be covered. The emphasis will be on control room work and coordinating the various elements of the total production.

**ALFRED AGRICULTURAL AND TECHNICAL COLLEGE**  
State University of New York  
Alfred, New York 14802

Contact:  
Jerry A. Gordon  
Curriculum Coordinator

The Agricultural and Technical College at Alfred is a two-year college, part of the State University of New York system. The school has an enrollment of approximately 3,100 full-time students. Accredited by the Middle States Association of Colleges and Secondary Schools, the college offers Associate in Science and Associate in Applied Arts degrees.

In 1968, Alfred began a two-year Associate in Applied Sciences degree program to train Audio-Visual Technicians. The curriculum is organized to provide basic knowledge and skills in the areas of graphics, duplicating processes, photography, and television. Each of these major areas is presented through "hands on" experience using modern techniques together with extensive laboratory time in the actual preparation or production of materials. Project laboratories provide practical experience in designing and producing materials commonly associated with the Instructional Resource Center in education, business, industry, and government.

**AUDIO-VISUAL TECHNOLOGY PROGRAM**

**FIRST YEAR**

*First Quarter*

AV 104 Photography I  
AV 123 Audio-Visual Technology &  
Equipment  
Math 133 Fundamentals of Math  
AV 103 Basic Design  
Eng 103 English I  
PE 101 Physical Education

*Third Quarter*

AV 202 Design for Media  
AV 314 Television I  
Phys 302 Audio-Visual Physics  
Eng 303 English III  
AV 302 Library Resources  
PE 301 Physical Education  
Business Elective. Psychology. or Typing

*Second Quarter*

AV 204 Duplicating Processes I  
AV 113 Audio-Visual Techniques  
MT 112 Engineering Graphics  
Sci 104 Physical Science  
Eng 203 English II  
PE 201 Physical Education

**SECOND YEAR**

*Fourth Quarter*

AV 434 Television II  
AV 504 Photography II  
Mkt 374 Salesmanship  
AV 422 Audio-Visual Projects Lab I  
SS 403 Principles of Economics

*Fifth Quarter*

AV 613 Motion Pictures  
Psych 123 General Psychology  
Mkt 563 Advertising Principles  
AV 522 Audio-Visual Projects Lab II  
AV 372 Technical Report Writing  
SS 503 American Government

*Sixth Quarter*

AV 614 Audio-Visual Department  
Management  
AV 603 Audio-Visual Research Project  
Restricted Elective  
Elective  
SS 603 International Relations

**COURSE DESCRIPTIONS**

**AV 103 Basic Design (3 units).**

Explores the sources of design inspiration and the principles fundamental to all visual media. Individual student design studies are developed in studio experimentation with color, surface and form in a variety of materials and techniques, including the student's ability in free-hand drawing. Both two-dimensional and three-dimensional design are considered.

**AV 113 Audio-Visual Techniques (3 units).**

A course designed to familiarize the student with the many techniques of overhead transparency production, dry mounting, story boarding, bulletin board design, flannel and magnetic board procedures, and flip chart utilization. The creative ability of the student will be explored. Emphasis will be on careful development, implementation and practice.

**AV 202 Design for Media (2 units).**

The course is structured around individual student projects in applied graphics oriented toward instructional materials in a variety of media. The idea of modular design and the combined use of photography and typography is emphasized.

**AV 204 Duplicating Processes I (4 units).**

Intensive instruction in offset principles and practices and letter press, and limited instruction in spirit and mimeograph duplicators. An involvement in the production of printed materials including both line and halftone negatives, stripping up, plate making, press operation, binding, and maintenance of equipment.

**AV 302 Library Resources (2 units).**

The student will explore the library as it relates to the instructional media field. The library as a resource center, search and retrieval systems, cataloging of non-book items, and providing easy access for materials are studied.

**AV 304 Duplicating Process II (3 units).**

Advanced offset duplicating productions. Emphasis is placed on color and multiple press runs, study of inks and paper stocks. The student will become familiar with comparative costs of raw materials, equipment, and finished materials.

**AV 372 Technical Report Writing (2 units).**

The student will be required to write short technical reports about current communications problems and present these reports in an effective manner, both visually and verbally.

**AV 123 Audio-Visual Technology and Equipment (3 units).**

This course will serve as an orientation to the field of audiovisual technology. The stu-

dents will be introduced to the latest developments in the field both in terms of hardware and software. Also a study will be made of the operation, maintenance and evaluation of AV equipment such as projection equipment, audio equipment, response systems, and specialized equipment.

**AV 104 Photography I (4 units).**

An introductory course in photography, including construction and use of the camera, darkroom equipment, composition, lighting and processing, and printing of black-and-white materials. An introduction to color photography theory and black-and-white transparencies.

**AV 504 Photography II (4 units).**

Advanced black-and-white photography. Introduction to processing of color materials. Emphasis is placed on practical color photography, story boarding, and sequencing of pictures in slide and filmstrip presentations.

**AV 603 Audio-Visual Research Project (3 units).**

An independent project, not involving formal instruction, of fully developing an approved, individual project—such as a film or brochure—from concept to finished production.

**AV 314 Television I (4 units).**

A study of television as used in open- and closed-circuit productions. The topics covered include the recognition and utilization of television equipment, the efficient design of studio space, programming, and production. The main emphasis of the course will be in handling television equipment and preparation of instructional television materials.

**AV 434 Television II (4 units).**

Planning and production of instructional television materials. Experience in scheduling, preparing and evaluating closed-circuit television instruction. Limitations, application and economics of television instruction.

**AV 422 Audio-Visual Projects Laboratory I (2 units).**

Required experience in preparation of audiovisual and instructional materials for use in the classroom. Experience with the various resource facilities utilizing the background gained through classroom preparation.

**AV 522 Audio-Visual Projects Laboratory II (2 units).**

Continuation of AV 422.

**AV 613 Motion Pictures (3 units).**

Characteristics of film productions. Individual student project in developing single concept film productions. Projects including both silent and sound films and film loops.

**AV 614 Audio-Visual Department Management (4 units).**

Study of the functions and responsibilities of the audiovisual department. Emphasis on evaluating and procuring equipment and instructional materials; budget making; record systems; analysis of school needs; development of an audiovisual research facility; production methods; scheduling of work and equipment; facility design.

**AV 623 Audio-Visual Equipment Maintenance (3 units).**

Set-up and maintenance of audiovisual equipment. Electrical requirements and limitations; checking, testing, cleaning, and control of audiovisual equipment. Periodic maintenance and service of equipment.

**MONROE COMMUNITY COLLEGE**  
 Rochester, New York 14607

**Contact:**  
 Eugene L. Edwards, Chairman and Associate Professor  
 Instructional Services

Monroe Community College is a public, two-year, coeducational college with an enrollment of approximately 5,000 day students and 3,500 evening students. It is accredited by the Middle States Association of Colleges and Secondary Schools and is authorized to award the Associate in Arts, Associate in Science, and Associate in Applied Science degrees.

In 1966, Monroe Community College initiated a two-year Associate in Applied Science degree program for the training of Audiovisual Technicians. This program provides students with knowledge and skills in the production of communications media, including photography, film, graphic arts, television, sound recording, and various combinations of these media. Audiovisual courses include such subjects as materials and machines used in the field, specific audiovisual skills and their relationship to the learning process, and conversion of ideas into audio and/or visual materials. As a part of their course work, students create audiovisual materials for use in live teaching situations. Graduates will be prepared to work in audiovisual or instructional resource centers of schools and colleges, or in commercial and industrial audiovisual departments preparing training aids and advertising materials.

**AUDIOVISUAL TECHNOLOGY PROGRAM**

**FIRST YEAR**

*First Semester*

ENG 101 English Composition	3
Social Science Elective	3
Science Elective	3
AVT 101 Intro. to Media	3
AVT 102 Media Graphics I	2
AVT 103 Media Photography I	2
PE 101 Physical Education	1
	<hr/> 17

*Second Semester*

SPT 101 Public Speaking	3
Social Science Elective	3
Science Elective	3
AVT 111 Technical Operation & Maintenance of Audiovisual Equip.	2
AVT 112 Media Graphics II	3
AVT 113 Media Photography II	3
PE 102 Physical Education	1
	<hr/> 18

**SECOND YEAR**

*Third Semester*

AVT 201 Duplication of Instructional Materials	2
AVT 202 Techniques of Television I	3
AVT 203 Instructional Film Production	2
Mathematics Elective	3
General Elective	3

*Fourth Semester*

AVT 211 Practicum of Instructional Media	3
AVT 212 Techniques of Television II	3
AVT 213 Audiovisual Technology Elective	3
General Electives	6

Psychology Elective	3	PE 202 Physical Education	<u>1</u>
PE 201 Physical Education	<u>1</u>		16
	17		

### **COURSE DESCRIPTIONS**

#### **AVT 101 Introduction to Media (3 units).**

Introductory course in educational media, acquaints the student with the role of educational media in the teaching-learning process. Includes a brief history of media; an introduction to products and processes involved in media utilization; an introduction to theories of communication, learning and perception, sources of media; cataloging, classification, distribution, and record keeping in media centers.

#### **AVT 102 Media Graphics I (2 units).**

Laboratory practice in the selection, manipulation, preservation, and conversion of inexpensive and readily available materials for both projected and non-projected use. Includes basic lettering, coloring and mounting in the preparation of maps, charts, posters, and graphs.

#### **AVT 103 Media Photography I (2 units).**

Introduction to photographic processes and equipment, and materials used in media production. Includes elementary sensitometry, equipment familiarization, camera operation and care, darkroom procedures, and simple lighting principles. Also includes laboratory experience in exposure and development of special purpose photographic materials for the production of projected and non-projected media.

#### **AVT 111 Technical Operation and Maintenance of Audiovisual Equipment (2 units).**

Develops the principles of operation for all varieties of projection and non-projection media hardware. Includes the basic characteristics of each type of equipment, including sound and optical systems; actual operation of a variety of equipment types; field maintenance of equipment as well as trouble shooting defective items and preventive maintenance procedures; and the application of specialized equipment types to instructional situations.

#### **AVT 112 Media Graphics II (3 units).**

Advanced techniques in the production of instructional materials using graphic arts techniques. Laboratory experiences in the production of filmstrip flats, multi-cell overlays, layouts for publication materials, advanced lettering and coloring techniques, and illustration.

#### **AVT 113 Media Photography II (3 units).**

Advanced photographic production of instructional materials. Includes color theory and color processing, portrait and studio lighting, filtration and related techniques in photographing real objects and difficult copy, color separation, single and multiple flash, slide duplication, and advanced darkroom techniques.

#### **AVT 201 Duplication of Instructional Materials (2 units).**

The basic process, theory and practice of techniques in the duplication of various types of instructional material, including slides, transparencies and paper copies such as ditto, mimeo, etc.; collation and assembly of materials. The accent will be on material master preparation and actual equipment operation.

**AVT 202 Techniques of Television I (3 units).**

Introduction to the basic aspects of technical and production techniques of television and related audio systems. Emphasis will be placed on theory and use of television equipment, staging, lighting, television graphics, scripting, basic engineering, distribution systems, and studio personnel.

**AVT 203 Instructional Film Production (2 units).**

Study of general film production techniques and application of research findings to production of educational motion picture materials for specific audiences. Includes scripting, studio and location lighting and shooting, editing techniques, and sounding.

**AVT 211 Practicum of Instructional Media (3 units).**

Individual assignment as an assistant to members of the instructional services staff for actual experience in photography, graphics, television and administrative problems, production, and procedures. Each individual will be assigned according to interests and capabilities, and will have the opportunity to gain experience in a number of areas or to concentrate in one aspect of instructional services, depending on objectives and professional goals.

**AVT 212 Techniques of Television II (3 units).**

Advanced techniques in the technical and production aspects of television programming. Emphasis will be placed on studio and control room operation, engineering experience, programmed planning, organization production, and direction of individual assignments and assigned responsibility for college instructional programming.

**AVT 213 Elective—Special Problems in Advanced Media (3 units).**

Research and production problems on an individual or group basis.

**STATE UNIVERSITY OF NEW YORK—FARMINGDALE**

Farmingdale, New York 11735

**Contact:**

Raymond C. Bowman, Chairman  
Department of Photographic Technology

The State University of New York at Farmingdale is a two-year coeducational college with an enrollment of approximately 4,500 full time students. Accredited by the Middle States Association of Colleges and Secondary Schools, the college offers the Associate in Science and Associate in Applied Science degrees. Certificates are offered in one-year programs.

Although the Audio-Visual Technology curriculum was approved in 1967, the first class of students was not enrolled until September 1969. The program lasts two semesters, and upon successful completion a certificate is awarded. The students will be prepared with both theoretical knowledge and practical skills to meet a wide range of job opportunities.

## AUDIO-VISUAL COMMUNICATIONS TECHNOLOGY PROGRAM

<i>First Semester</i>		<i>Second Semester</i>	
EN100 English Composition	3	BA 162 Business Communications	3
AV100 Electrical Fundamentals	3	AV 103 Electrical Circuits	3
AV101 Audio-Visual Equipment I	4	AV 104 Audio-Visual Equipment II	5
AV 102 Visual Communications Techniques I	4	AV 105 Visual Communications Techniques II	4
PH121 Physics	3	SO Social Science Elective	3
	17		18

### COURSE DESCRIPTIONS

#### **AV100 Electrical Fundamentals (3 units).**

Material covered in this course includes electrical terminology and definitions; instruments used in the measurement of electrical quantities; electrical construction, assembly and soldering techniques; the 100 volt A.C. power source with related safety procedures; a general study of electrical motors commonly used in audio and visual equipment; and the related preventive maintenance procedures.

#### **AV101 Audio-Visual Equipment I (4 units).**

Mechanical principles. In this first course in audiovisual equipment the mechanical aspects of maintenance, repair and operation will be explored. Students will be expected to acquire a high degree of proficiency, both in the operating skills and the correction of routine mechanical malfunctions in a wide range of specialized equipment.

#### **AV102 Visual Communications Techniques I (4 units).**

A study of the basic theoretical and practical aspects of visual communication. Here the student will not only develop an appreciation for the special values of visually oriented communications, but he will also begin the first phase of the skills development required to convert ideas into visual images.

#### **AV103 Electrical Circuits (3 units).**

In this course D.C. power sources will be introduced. Battery supplies, rectifier circuits, D.C. to A.C., D.C. to D.C., and Ohm's Law as applied to both series and parallel circuits. Checking and replacement of electron tubes and transistors.

#### **AV104 Audio-Visual Equipment II (5 units).**

Electrical principles. In this second course in audiovisual equipment, the electrical and electro-mechanical aspects of maintenance, repair and operation will be studied. In addition to the equipment previously introduced, the student will have some opportunities to work with teaching machines and their response systems, videotape recording equipment, and closed-circuit TV systems.

#### **AV105 Visual Communications Techniques II (4 units).**

A continuation and expansion of materials covered in AV102. In the production of audiovisual materials, more advanced and complete procedures are involved and include special copy techniques, black-and-white and color slide production, filmstrip production, and the principles of Super 8 and 16mm cinematography. Planning for production of materials; establishing and operating preventive maintenance programs; sources of supply; and methods of selecting, evaluating and ordering A.V. equipment will serve as the basis for the lecture aspects of the course.

**TULSA JUNIOR COLLEGE**  
Tulsa, Oklahoma 74119

Contact:  
William Welk

The Media Technician program at Tulsa Junior College is designed to train persons in the necessary skills needed to function as a Media Technician or Media Equipment Technician. The program combines formal class work, laboratory practice, and on-the-job experience. The Associate degree is awarded to those who successfully complete the two-year curriculum in a field of specialization.

**CORE CURRICULUM**

**FIRST YEAR**  
*Fall Semester*

DRF 1324 Basic Graphics	4
ELE 1314 Electric Circuit Analysis	4
MT 1313 Audio-Visual Equipment	3
MTH 1313 Technical Mathematics I	3
TEP 1314 Fundamentals of Television & Radio	4
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	18

*Spring Semester*

BUS 2363 Supervisory Management	3
JOU 1013 Intro. to Mass Communications	3
MT 2313 Basic Graphic Productions	3
MT 2324 Audio-Media & Graphics	4
TEP 2313 Television & Radio Production Techniques	3
	<hr/>
	16

**MEDIA PRODUCTION TECHNICIAN OPTION**

**SECOND YEAR**  
*Fall Semester*

COM 1313 Applied Composition & Speech I	3
MT 2373 Audio Projection Techniques	3
MT 2333 Advanced Graphic Production	3
SSC 1313 Historical & Contemporary American Society I	3
TEP 2323 Television & Video Tape Production Techniques	3
	<hr/>
	15

*Spring Semester*

COM 1323 Applied Composition & Speech II	3
MT 2343 Special Projects	3
MT 2363 Field Application	3
MT 2383 Production Design	3
SSC 1323 Historical & Contemporary American Society II	3
	<hr/>
	15

**MEDIA EQUIPMENT TECHNICIAN OPTION**

**SECOND YEAR**  
*Fall Semester*

COM 1313 Applied Composition & Speech I	3
ELE 1324 Electronic Amplifiers	4

*Spring Semester*

COM 1323 Applied Composition & Speech II	3
MT 2343 Special Projects	3

MT 2353 Service & Repair of Audio Projection Equipment	3	MT 2363 Field Application	3
MT 2393 Shop Design & Operational Procedures	3	SSC 1323 Historical & Contemporary American Society II	3
SSC 1313 Historical & Contemporary American Society I	3	TEP 1324 Television & Radio Electronics	4
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	16		16

#### **COURSE DESCRIPTIONS**

##### **DRF 1324 Basic Graphics (4 units).**

A beginning course for students who have had little or no previous experience in drafting. The principle objectives are a basic understanding of orthographic projection; skill in orthographic, axonometric, oblique, and perspective sketching and drawing. Emphasis is placed on applied techniques. The course is objectively designed to develop manipulative skills and an ability to think and see in three dimensions.

##### **ELE 1314 Electric Circuit Analysis (4 units).**

An introductory course in basic electrical phenomena, including the atomic structure of the electrical materials and basic electrical units and circuits. The course is developed on a foundation of practical laboratory experience and forms a basis for subsequent courses in electronics, computers and communications.

##### **MT 1313 Audio-Visual Equipment (3 units).**

Introduction to the operation, use and maintenance of the various types of audiovisual equipment; selection, production and use of materials.

##### **MTH 1313 Technical Mathematics I (3 units).**

A course designed for technical-occupational students covering a general review of arithmetic, fundamentals of plane and solid geometry, computations with the slide rule, etc.

##### **TEP 1314 Fundamentals of Television & Radio (4 units).**

This course is designed to develop an understanding and an appreciation of radio and television. Introduction to radio and television operations and systems. Field trips will be made to area stations.

##### **BUS 2363 Supervisory Management (3 units).**

A study of management philosophy and decision making processes; study of principles in the functions of planning, organizing, supervising, and controlling.

##### **JOU 1013 Introduction to Mass Communications (3 units).**

A survey course designed to provide students with a panoramic view of the field of mass communications and an understanding of the role of mass media in modern society.

##### **MT 2313 Basic Graphic Productions (3 units).**

History of major printing processes, application of layout and design, hot and cold type composition, proofreading, paste up, process photography, offset production procedures. Paper, printing inks, bindery, and legal restrictions.

##### **MT 2324 Audio-Media and Graphics (4 units).**

Introduction to the procedures and techniques applicable to the production of all types of films.

**TEP 2313 Television and Radio Production Techniques (3 units).**

Techniques and skills in TV production, including use of TV cameras, switching equipment, studio lighting, audio equipment, film chains, and other components of closed-circuit television.

**MT 2373 Audio Projection Techniques (3 units).**

Techniques and procedures applicable to the production of various types of audiovisual aids.

**MT 2333 Advanced Graphic Production (3 units).**

Preparation of material to be reproduced and basic knowledge of graphic arts, procedures, basic techniques in photo composition and paste up, theory and practice in hand and machine ruling, cold and hot type copy, darkroom operation, and techniques in simple camera operation.

**TEP 2323 Television and Video Tape Production Techniques (3 units).**

Practical application of television and videotape production techniques. Students adapt broadcast techniques in preparing instructional materials including television programs, slides, and films.

**MT 2343 Special Projects (3 units).**

Individual student projects involving the production of audiovisual aids.

**MT 2363 Field Application (3 units).**

Field experience working in the media areas of local industry and institutions as assigned by the program instructor.

**MT 2383 Production Design (3 units).**

Basic principles of designing and developing radio and television programs.

**ELE 1324 Electronic Amplifiers (4 units).**

A thoroughly modern introduction to high vacuum and solid state electronic devices and basic electronic circuits, including small signal and power amplifiers, feedback principles, as well as electronic power supplies and related circuitry. The course features a closely integrated laboratory to provide up-to-date experience in electronic applications.

**MT 2353 Service and Repair of Audio Projection Equipment (3 units).**

Basic fundamentals of functions; trouble diagnosis; how to dismantle, repair and re-assemble audio projection equipment.

**MT 2393 Shop Design and Operational Procedures (3 units).**

Principles and procedures of designing and operating a media equipment maintenance shop.

**TEP 1324 Television and Radio Electronics (4 units).**

Basic physical equipment of the studio and theater. Will include theory, design and repair of lighting, sound, color, and audio equipment.

**PORTLAND COMMUNITY COLLEGE**  
 Portland, Oregon 97207

Contact:  
 Ray Pirkl  
 Instructional Materials

Portland Community College is a two-year, public college with an enrollment of approximately 8,500 full time students. The college is approved by the State Department of Education. Vocational-technical, liberal arts, and general studies are offered, as well as a community education program.

Since 1963, Portland Community College has offered a three-term, one-year program to train Instructional Materials Aides. The program provides instruction in operating audiovisual equipment; planning and producing instructional materials; assisting school librarians; assisting students with basic learning problems via tape recordings, flashcards, etc.; and supplementing office staff in preparation of printed materials for teachers.

**INSTRUCTIONAL MATERIALS AIDES PROGRAM**

<i>Fall Term</i>		<i>Winter Term</i>	
Instructional Materials Orientation	2	Instructional Materials Production II	5
Audio-Visual Equipment I	2	Television Production I	3
Instructional Materials Production I	5	Color Line & Design	2
Typing	2	Copy Preparation	2
School Library Procedures	3	Electives (Audio-Visual Equipment II, Photography, Typing, School Library Materials)	8
Electives (Lettering & Basic Design or Basic Drafting)	4		
	14-18		12-20
<i>Spring Term</i>			
Supervised School Experience	4		
Seminar—Independent Study	3		
Instructional Materials Production III	4		
Display & Advertising Layout	2		
Electives (Photography, Copy Preparation II, Typing, School Library Materials)	9		
	13-22		

**COURSE DESCRIPTIONS**

**Instructional Materials Orientation (2 units).**

A study of the learning process and the role of instructional materials. Includes a review

of local production of materials in curriculum development, and instructional materials department organization.

**Audio-Visual Equipment I, II (2 units each).**

Instruction in the operation and maintenance of 16mm projectors, filmstrip projectors, tape recorders, record players, slide projectors, opaque projectors, radios, videotape recorders and cameras, and public address systems.

**Instructional Materials Production I, II, III (I & II, 5 units each; III, 4 units).**

Laboratory work in the development of instructional materials for different courses. Students will prepare overhead transparencies, slides, displays, materials, models, mockups, and other materials. Basic photography, lithography, and related skills will be offered.

**Survey of School Library Procedures (3 units).**

Survey of the fundamental principles for the operation of a school library. Consideration given to objectives, budget, housing, personnel, materials and equipment, state and regional standards.

**School Library Materials (3 units).**

Emphasizes selection and evaluation of library materials—book and non-book—with attention focused on the selection aids needed for appropriate school materials.

**Supervised School Experience (4 units).**

Aims to acquaint the student directly with teacher aide work through actual experiences in an active school situation. These experiences are under a head teacher, and are closely supervised by the college instructor.

**Seminar—Independent Study (3 units).**

Provides time and direction for investigating particular problems brought out in the supervised school experience.

**Television Production I (3 units).**

Instruction in basic set-up and operating procedures of portable CCTV systems.

**TARRANT COUNTY JUNIOR COLLEGE**

Hurst, Texas 76053

**Contact:**

R. L. Clausser

The Instructional Media Technician program at Tarrant County Junior College leads to an Associate of Applied Science degree. A highlight of the program is the opportunity to gain first-hand experience through practicums in instructional media and equipment, study of fundamentals of photography, and an internship in instructional media.

With the continued expansion of the use of educational media has come great demand

for competent personnel to perform the specialized duties in utilizing media. The program at Tarrant aims to supply that demand.

### INSTRUCTIONAL MEDIA TECHNICIAN PROGRAM

#### FIRST YEAR

##### *First Semester*

ENG 1301 Applied Communications I or ENG 1613 English Composition I	3
BEE 1613 Educational Processes	3
PSY 1513 Psychological Development I	3
MET 1604 Basic Instructional Media	4
FIN 2611 Fine Arts Survey I	1
PSY 1611 Freshman Orientation	1
HPE 1611 Basic Physical Education	1
	<hr/>
	16

##### *Second Semester*

ENG 1313 Applied Communications II or ENG 1623 English Composition II	3
PSY 1523 Psychological Development II	3
MET 2604 Instructional Media Production	4
MET 1613 Library Practice I	3
PHY 1613 Fundamentals of Physics	3
FIN 2621 Fine Arts Survey II	1
HPE Physical Education Activity	1
	<hr/>
	18

#### SECOND YEAR

##### *First Semester*

GOV 1614 The American Political System	4
BEE 2633 School Procedures	3
JRN 1633 Fundamentals of Photography	3
MET 2603 Library Practice II	3
MET 2614 Advanced Media Production	4
	<hr/>
	17

##### *Second Semester*

BEE 2613 The Learning Process	3
MET 2624 Audio & Video Techniques	4
MET 2653 Media Technician Seminar	3
MET 2638 Media Technician Internship	8
	<hr/>
	18

#### COURSE DESCRIPTIONS

##### **BEE 1603 Educational Processes (3 units).**

An overview of the field, both as a profession and as a public and private enterprise, from pre-school through junior college. Emphasis is placed on the contribution and influence of education on our culture and economy.

##### **MET 1604 Basic Instructional Media (4 units).**

Designed to lend an understanding of appropriate classroom utilization techniques for the various types of equipment and to develop competencies in the operation and preventive maintenance of equipment.

##### **MET 2603 Library Practice II (3 units).**

An introduction to the basic skills associated with public services in libraries, including circulation, informational services, and special programs.

##### **MET 2614 Advanced Media Production (4 units).**

A basic course in the local production of projected materials by photographic processes and techniques. Laboratory fee charged.

**MET 2624 Audio and Video Techniques (4 units).**

A course in the practical selection, set up, and operation of electronic devices for audio and/or video amplification, distribution, recording, playback, and duplication.

**MET 2653 Media Technician Seminar (3 units).**

Investigation, discussion and practice in the selection, cataloging, storage, maintenance, and distribution of audiovisual hardware and software.

**MET 2638 Media Technician Internship (8 units).**

Actual experience in operational situations involving different aspects of instructional media production, distribution, utilization, and maintenance.

**MET 2604 Instructional Media Production (4 units).**

A practical approach to techniques in local production of basic graphic materials for use in the classroom. It will include practice in layout, lettering, mounting, laminating, thermal transparency process, and duplicating methods.

**MET 1613 Library Practice I (3 units).**

An introduction to the basic skills associated with the acquisition, organization, preparation, and preservation of library materials.

**BEE 2633 School Procedures (3 units).**

Orientation to school organization, procedures, grouping practices, individual instruction, and staff utilization. The role of the teacher assistant, educational aide, and instructional media technician is explored.

**JRN 1633 Fundamentals of Photography (3 units).**

Designed for the beginner, this course includes basic theories and techniques of picture taking, film processing, photographic enlargements, and principles of composition.

**TEXAS STATE TECHNICAL INSTITUTE**

James Connally Campus  
Waco, Texas 76705

**Contact:**

Gerald Graver  
Program Chairman

The Instructional Media Technology program is one of the newest programs at the James Connally Campus. It is designed to train technicians to produce classroom teaching aids such as audiovisual materials and other software necessary in the educational environment. The program requires two years of study with supervised practical experience in the design and preparation of instructional materials. The Associate in Applied Science degree will be conferred upon the successful completion of the program.

## INSTRUCTIONAL MEDIA TECHNOLOGY PROGRAM

### FIRST YEAR

#### *First Trimester*

GT 100 Orientation	1	
IMT 120 Intro. to Instructional Technology	3	
CAA 110 Composition & Design	3	
TWG 101 Communication Skills I	3	
TWG 112 Basic Photography	4	
	14	

#### *Second Trimester*

IMT 125 Intro. to Instructional Technology II		3
IMT 150 AV Processes & Production I		3
CAA 112 Perspective Drawing		3
TWG 103 Communication Skills II		3
IMT 160 Fundamentals of Color Photography		.

#### *Third Trimester*

IMT 251 AV Processes & Production II	3	
IMT 260 Graphics in Instructional Materials	3	
IMT 270 Foundations of Education	3	
IMT 280 Communicating through Instructional Media	3	
Elective	3	
	15	

### SECOND YEAR

#### *Fourth Trimester*

IMT 285 Technology & the Learning Process		3
IMT 252 AV Processes & Production III		3
IMT 265 Instructional Television		3
IMT 290 Media Center Operation I		3
Elective		3
		15

#### *Fifth Trimester*

CAA 232 Art for Reproduction	4	
IMT 360 Advanced Media Technology I	3	
IMT 390 Media Center Operation II	3	
IMT 370 Instructional Media Internship I	3	
	13	

#### *Sixth Trimester*

IMT 365 Advanced Media Technology II		3
IMT 375 Instructional Media Internship II		3
Electives		9
		15

### COURSE DESCRIPTIONS

#### **IMT 120 Introduction to Instructional Technology I (3 units).**

This course provides an overview of educational technology.

#### **IMT 125 Introduction to Instructional Technology II (3 units).**

Continuation of overview of educational technology.

#### **IMT 150 AV Processes and Production I (3 units).**

The theory and practices of basic reproduction techniques, mimeographing, duplicating processes, diazo process. Theory and practice of preparing materials for the overhead projector, charts, models, and other basic classroom visuals.

**IMT 251 AV Processes and Production II (3 units).**

The theory and practice of utilizing audio techniques in the classroom. The use of tape recorders, public address systems, knowledge of basic acoustics, maintenance of audio equipment, proper use of recording equipment.

**IMT 160 Fundamentals of Color Photography (3 units).**

Basic principles of photographing with color reversal film, still and 8mm motion picture photography, camera techniques, composition, kinds and types of film, film editing.

**IMT 265 Instructional Television (3 units).**

Instructional television production techniques, planning, preparation, and presentation of materials suitable for use on classroom VTR equipment. Camera operation and minor maintenance and adjustment of television equipment, tape splicing, and maintenance of videotape materials.

**IMT 260 Graphics in Instructional Materials (3 units).**

Specific applications of applied graphics in the development of instructional materials. Activities focused on unique use of design and graphic techniques in audiovisual materials.

**IMT 360 Advanced Technology I (3 units).**

Individualized programs based on student's specific area of interest and specialization. Such interest might include advanced work in educational television, photography, or other training.

**IMT 365 Advanced Technology II (3 units).**

Continuation of Advanced Technology I.

**IMT 370 Instructional Media Internship I (3 units).**

Supervised practical experience in the design and preparation of instructional materials to be utilized in the classroom. Students will work with instructors at Texas State in the design and production of AV instructional aids.

**IMT 375 Instructional Media Internship II (3 units).**

Supervised field work off the campus. Students will be assigned to schools or other institutions which utilize the services of media technicians.

**IMT 290 Media Center Operation I (3 units).**

Function and operation of the AV center, including processing and cataloging of materials, scheduling of materials and equipment, inventory, ordering of materials, and basic bookkeeping procedures.

**IMT 390 Media Center Operation II (3 units).**

Providing services needed in the schools, instructing teachers in the use of equipment and materials, conducting training sessions, techniques of teaching, and group relations.

**IMT 270 Foundations of Education (3 units).**

To prepare the instructional media technician to work in the school setting. An overview of the organization of the school, personnel roles, and basic curriculum design.

**IMT 285 Technology and the Learning Process (3 units).**

Shows the relationship between audiovisual and other instructional media in the classroom process. An overview of classroom teaching methods, human relations in the school, group dynamics.

**IMT 280 Communicating through Instructional Media (3 units).**  
 Specific applications of written and verbal skills in the production of audiovisual materials.

**BELLEVUE COMMUNITY COLLEGE**  
 Bellevue, Washington 98007

Contact:  
 Boyd M. Bolvin  
 Associate Dean of Instruction

Bellevue Community College began offering a two-year Media Technician program in the fall of 1971. The program is designed to train students in the various skills needed to function in the capacity of an audiovisual media technician in schools, business and industry. It is intended as a two-year terminal program, at the end of which the students will have the basic skills needed to be employable in the audiovisual media field. The skills learned will range from operation, maintenance and repair of equipment to the various production techniques needed to be an effective media technician.

Although intended as a two-year terminal program, the student may, after receiving his Associate of Arts degree, transfer to a four-year institution for further study in the audiovisual field.

**MEDIA TECHNICIAN PROGRAM**

FIRST YEAR		SECOND YEAR	
ENGL 101 English Composition	5	PSYCH 100 Intro. to Psychology	5
ENGL 102 English Composition	5	PHYS 115 Mechanics & Sound	5
AVMT 180 Intro. to Audiovisual Media	3	PHYS 100 Intro. to Physical Science	5
AVMT 181 Organization & Management of AV Materials	5	AVMT 183 AV Media Production I	5
AVMT 182 AV Equipment, Operation & Maintenance	3	AVMT 184 AV Media Production II	5
ART 109 Design	3	AVMT 185 Practicum in Audiovisual Media	3
EDUC 110 Intro. to Education	5	AVMT 186 Audiovisual Equipment Repair	3
QM 100 Electronic Data Processing Orientation	3	PHOTO 102 Intermediate Photography	3
PHOTO 101 Beginning Photography	3	MEDIA 176 Instructional Television Production	3
OFF 101 or 102 Beginning of Intermediate Typing	2	Electives	8
PE Physical Education Activity	3		<hr/> 45
MEDIA 175 Intro. to TV Production	3		
Electives	5		

**MILWAUKEE AREA TECHNICAL COLLEGE**  
 Milwaukee, Wisconsin 53203

Contact:  
 Victor G. Langer  
 Instructional Resources Coordinator

Wisconsin's system of vocational, technical and adult schools was established in 1911. During more than half a century, its local schools have developed to their present stature by following the principle of responsiveness to changing needs and conditions of rapid change. From the beginning, their purpose was to provide continuing educational and vocational education for working youth and adults, educational and vocational guidance, exploratory and preparatory training, upgrading and retraining, and rehabilitation for young and older people seeking employment.

The Visual Communications program at the Milwaukee Area Technical College is designed to develop communications coordinators, technicians who understand the function of both the creative arts and the graphic communications technologies, and who can bring them together for common analyses of communication problems and combined approaches to the production of communication media. Completion of the program successfully leads to an Associate degree.

**VISUAL COMMUNICATIONS PROGRAM**

**FIRST YEAR**

*First Semester*

ViCom 100 Orientation to Visual Communications	1
ComArt 103 Design I	3
Photo 101 Fundamental Photography	3
Prtg 103 Graphic Communication Processes	3
ENG 151 Communication Skills I	3
SocSci 151 Psychology of Human Relations	3
	<hr/>
	16

*Second Semester*

ComArt 104 Design II	3
Photo 108 Photographic Lighting	3
Prtg 104 Production Processes	3
ENG 152 Communication Skills II	3
NatSci 131 Physical Science Survey I	3
PhyEd 101 Physical Education	1
	<hr/>
	16

**SECOND YEAR**

*First Semester*

ViCom 101 Communications Problems I	4
Eng 105 Journalism I	3
Math 151 Technical Mathematics I	4
SocSci 153 American Institutions	3
Elective	3
	<hr/>
	17

*Second Semester*

ViCom 102 Communications Problems II	3
ViCom 121 Electronic Media	2
Prtg 144 Production Planning & Control	3
SocSci 155 Business & Industrial Relations	3
Elective	6
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	17

### **COURSE DESCRIPTIONS**

#### **VICom 100 Orientation to Visual Communications (1 unit).**

A study of the nature of communication, the problems associated with communication, and the influences of communication upon people.

#### **VICom 101 Communications Problems I (4 units).**

Communications projects—using representative basic media as vehicles—are planned, developed and completed by students working in terms of, and experiencing total involvement in, the solutions of problems.

#### **VICom 102 Communications Problems II (3 units).**

A continuation of Communications Problems I projected into the use of more sophisticated media and emphasizing the production of communication materials involving multi-media treatment.

#### **VICom 121 Electronic Media (2 units).**

Applications of taping, recording, telecasting, and computerization are evaluated and analyzed in terms of creating effective channels of communications.

#### **VICom 131 Audio-Visual Techniques I (3 units).**

Explanations, demonstrations, assignments, and principles of content planning, script writing, audio recording, transparencies, and slide production are presented and discussed. Includes lectures, demonstrations and workshop experience.

#### **VICom 132 Audio-Visual Techniques II (3 units).**

Classroom television production and recording techniques are demonstrated and then practiced in a lecture-demonstration and workshop environment. Emphasis is placed on program content and equipment operation.

### **HUMACAO REGIONAL COLLEGE**

Humacao, Puerto Rico

#### **Contact:**

Roberto L. Estrella, Director  
Audio-Visual Department

### **COURSE DESCRIPTIONS**

#### **Com 101 Education and Technology (4 units).**

This course deals with the history and psychology of the audiovisual field, and the role of audiovisual techniques in learning. The theories and processes of communication and learning are discussed. Analysis of innovative projects involving technology as a means to improve learning. Proper utilization of equipment and materials.

#### **Com 102 Production of Materials (3 units).**

Theory and practice in the design and preparation of graphic and photographic material. Mounting, laminating, design, composition, production, and reproduction of graphic materials and transparencies.

**Com 103 Recording Techniques (2 units).**

General principles of recording and their application. Reel-to-reel, cassette, motion picture, sound track recording, and videotape. Proper selection and utilization of microphones and other recording equipment.

**Com 104 Television (4 units).**

Television production techniques for industry and education. Special program design and production. Studio and remote programs will be produced.

**Com 105 Radio and Television Studio Cooperation (3 units).**

Proper separation of radio and television controls, including specialized reader and audio recording equipment.

**Com 106 Script Writing (2 units).**

The students will be involved in the actual preparation of scripts on topics of individual interest.

**Com 107 Advanced Production (4 units).**

Design and production of instructional media packages, auto-tutorial units, and other complex materials for instruction.

**Com 108 Internship (4 units).**

Supervised internship in a recognized media program on or off campus.

**Com 109 Introduction to Photography and Cinematography.**

Introduction to photography and cinematography as instructional tools, from the very first steps in camera operation to the actual production of a final product.

**Com 110 Equipment Maintenance and Repair (3 units).**

Minor repairs of audiovisual equipment such as recorders, projectors, graphic arts equipment, etc. Includes electronic as well as mechanical aspects.

**Com 111 The Instructional Material Center (3 units).**

Training in the management of a technology program. Principles of selection, classification, cataloging, and storage of instructional materials.

**HUMBER COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

Rexdale, Ontario

**Contact:**

M. C. Ward, Chairman  
Instructional Materials Centre

Humber College is one of 20 community colleges in the province of Ontario offering one-year, two-year, and three-year diploma courses.

A program to train Instructional Materials Centre Technicians was initiated in October

1969. The course is at present being offered on a cooperative basis, combining classroom and actual working experience.

### INSTRUCTIONAL MATERIALS CENTRE TECHNICIAN PROGRAM

#### FIRST YEAR

##### *First Semester*

Drafting  
Electronics I  
Audio Visual I  
Mathematics  
Photography I  
Office Skills

##### *Second Semester*

Graphic Arts I  
Electronics II  
Audio Visual II  
Photography II  
Elements of Data Processing

#### SECOND YEAR

##### *Third Semester*

Graphic Arts II  
Audio Visual Maintenance I  
Audio Visual III  
Human Relations I  
Communications in Business & Industry  
Elective

##### *Fourth Semester*

Audio Visual Maintenance II  
Theories of Management  
Audio Visual IV  
Human Relations II  
Language Laboratory Operations  
Elective

### SENECA COLLEGE

Willowdale, Ontario

#### Contact:

Solomon Dworkin, Course Director  
Audio-Visual Techniques

In September 1968, the first Audio-Visual Technician course was offered at Seneca College. A two-year course is also offered to train Educational Resource Technicians. The Audio-Visual Technician course is designed to fill the increasing need for people proficient in the production and use of audiovisual media. The course is designed to provide the graduate with a theoretical and practical background in closed-circuit television, and a proficiency in the fields of graphics, photography and the maintenance of equipment. In addition, the graduate will be skilled in the production, care and organization of audiovisual materials.

The Educational Resource Technician course is designed to prepare students to play a paraprofessional role in schools and school systems. Some of the areas in which students develop skill and knowledge are in the operation of all types of audiovisual equipment

and materials, as a business assistant in charge of textbooks distributed to students, other business arrangements of the school, or as a laboratory assistant.

### EDUCATIONAL RESOURCE TECHNICIAN PROGRAM

#### FIRST YEAR

##### *First Semester*

Audio-Visual 101  
Business Skills 100  
Philosophy 101  
Liberal Studies Option  
English & Communications Option

##### *Second Semester*

Education 141  
Psychology 235  
Business Practice 205  
Liberal Studies Option  
English & Communications Option

#### SECOND YEAR

##### *Third Semester*

Crafts 111  
Audio-Visual 211  
Sociology 256  
Liberal Studies Option  
English & Communications Option

##### *Fourth Semester*

Laboratory Methods 466  
Audio-Visual 321  
Communications Media Option  
Liberal Studies Option  
English & Communications Option

### AUDIO-VISUAL TECHNICIAN PROGRAM

#### FIRST YEAR

##### *First Semester*

Audio-Visual 111  
Physics 117  
Graphics 111  
Liberal Studies Option  
English & Communications Option

##### *Second Semester*

Audio-Visual 221  
Audio-Visual 212  
Electronics 227  
Liberal Studies Option  
English & Communications Option

#### SECOND YEAR

##### *Third Semester*

Audio-Visual 321  
Film Production 321  
Electronics 321  
Liberal Studies Option  
English & Communications Option

##### *Fourth Semester*

Audio-Visual 431  
Television Operation 421  
Psychology 188  
Liberal Studies Option  
English & Communications Option

### COURSE DESCRIPTIONS

#### **Audio-Visual 101.**

An introductory course in audiovisual techniques designed to introduce students to the methods of producing audiovisual instructional materials. Some features of the course include operation of overhead, 35mm slide, filmstrip, 16mm sound, and opaque projectors; the operation and maintenance of audiotape recorders; and the production of overhead transparencies, 35mm slides, and duplicate slides.

**Audio-Visual 111 Introduction.**

An introduction to audiovisual materials and equipment. The course includes the production of audiovisual materials such as overhead transparencies and slides.

**Audio-Visual 211.**

A few of the areas covered in the course include the production of 35mm filmstrips; the photographing of instructional materials in 35mm slide format; the preparation of flannel boards and dry mount pictures; methods of performing still photography assignments; and the means of operating a videotape recorder. Instruction is also given in the maintenance of audiovisual supplies and equipment.

**Audio-Visual 221 Workshop.**

A continuation of Audio-Visual 111. Includes practical assignments in production and presentation and how and where to find various instructional media.

**Audio-Visual 321 Media Methods.**

Practical assignments in the use and production of audiovisual materials. Includes advanced photographic techniques, sound-slide presentations, on-the-job training in the college's Instructional Media Center, and an introduction to Super 8 filmmaking.

**Audio-Visual 431 The Presentation Portfolio.**

Requires the students to create a portfolio for themselves and the school which can be shown to prospective employers as an example of their level of achievement and proficiency. Includes one major multi-media project in the form of a practical thesis.

**Physics 117 Science for Audio-Visual Specialists.**

Principles of physical science as applied to audiovisual techniques. Included are light, sound, color, and photographic chemistry. The subject is treated non-mathematically.

**Graphics 111 Audio-Visual Graphics.**

Lettering, layout, design, and color as applied to AV materials. Includes the use of press-on letters for overhead transparencies, slides, flip charts, posters, and television titles. Practical assignments are given.

**Audio-Visual 212 Basic Photography.**

An introduction to the theory and practice of black-and-white still photography. Includes darkroom techniques and the photo essay.

**Electronics 227 Basic Electronics for Audio-Visual Specialists.**

An introduction to basic electronics as applied to audiovisual equipment.

**Electronics 321 Practical Electronics.**

The electronics of audiovisual equipment. Includes on-the-job training.

**Television Production 421 Television Operation.**

A customized TV production course. Covers the materials and equipment as well as the technical production of live and taped presentations.

**Film Production 321 Film Production for Education and Business.**

A customized course which covers the production of educational and business films. Included are planning, scripting, shooting, editing, and recording.

**Psychology 188 Psychology for the AV Specialist.**

Designed to familiarize students with some of the basic concepts of the psychology of organizations and human relations. Topics covered include human motivation, morale, group behavior, organizational behavior, leadership, and communications.

# APPENDICES

## **APPENDIX A. Institutions Having Educational Media Technician Programs.**

Institutions marked \* have programs which are described in detail in the preceding chapter. Detailed information was not provided by the remaining institutions, and consequently information concerning the current existence or extent of programs at these institutions must be obtained from them directly.

### **ARIZONA**

- \*Pima College, Tucson

### **CALIFORNIA**

- Citrus College, Azusa
- \*City College of San Francisco, San Francisco
- \*Grossmont College, El Cajon
- Los Angeles City College, Los Angeles
- Modesto Junior College, Modesto

### **COLORADO**

- \*Community College of Denver, Denver
- \*Mesa College, Grand Junction

### **CONNECTICUT**

- Northwestern Connecticut Community College, Winsted

### **DISTRICT OF COLUMBIA**

- Washington Technical Institute

### **FLORIDA**

- \*Hillsborough Community College, Tampa
- Polk Community College, Winter Haven

### **ILLINOIS**

- \*College of DuPage, Glen Ellyn
- \*Thornton Community College, South Holland

### **IOWA**

- Des Moines Area Community College, Ankeny
- \*Southwestern Community College, Creston

### **KANSAS**

- St. John's College, Winfield

### **KENTUCKY**

- \*Richmond Community College, Richmond

### **MARYLAND**

- \*Anne Arundel Community College, Arnold

### **MASSACHUSETTS**

- \*Greenfield Community College, Greenfield

### **MICHIGAN**

- \*Macomb County Community College, Mount Clemens
- \*Oakland Community College, Farmington

### **MINNESOTA**

- \*Lakewood State Junior College, White Bear Lake
- North Hennepin State Junior College, Minneapolis

### **MISSOURI**

- East Central Junior College, Union

### **NEBRASKA**

- Central Nebraska Technical College, Hastings

### **NEW JERSEY**

- Essex County College, Newark
- \*Mercer County Community College, Trenton

### **NEW MEXICO**

- New Mexico Military Institute, Roswell

### **NEW YORK**

- \*Alfred Agriculture And Technical College, Alfred
- Hudson Valley Community College, Troy
- \*Monroe Community College, Rochester
- \*State University of New York—Farmingdale, Farmingdale

### **NORTH CAROLINA**

- Technical Institute of Alamance, Burlington

### **NORTH DAKOTA**

- North Dakota State School of Science, Wahpeton

**OHIO**

Cayhoga Community College, Cleveland

**OKLAHOMA**

\*Tulsa Junior College, Tulsa

**OREGON**

\*Portland Community College, Portland

**TEXAS**

Brazosport College, Lake Jackson  
\*Tarrant County Junior College, Hurst  
\*Texas State Technical Institute, Waco

**VIRGINIA**

Virginia Western Community College,  
Roanoke

**WASHINGTON**

\*Bellevue Community College, Bellevue  
Skagit Valley College, Mt. Vernon  
Washington State Community College,  
Spokane

**WISCONSIN**

Madison Area Technical College, Madison  
\*Milwaukee Area Technical College,  
Milwaukee

**PUERTO RICO**

\*Humacao Regional College, Humacao

**CANADA**

\*Humber College, Rexdale Ontario  
\*Seneca College of Applied Arts and  
Technology, Willowdale Ontario

## **APPENDIX B.**

### **Institutions Having Library Technician or Technical Assistant Programs.**

Actual program descriptions and course titles and/or outlines were *not* requested from the institutions listed here. Since programs change rapidly, information concerning the current existence or extent of programs at these institutions must be obtained from the institutions directly.

#### **ALABAMA**

The Marion Institute, Marion

#### **ARIZONA**

Arizona Western College, Yuma  
Maricopa County Community College,  
Phoenix  
Pima College, Tucson

#### **CALIFORNIA**

Cabrillo College, Aptos  
Chaffey College, Alta Loma  
College of the Canyons, Valencia  
College of the Desert, Palm Desert  
College of the Siskiyous, Weed  
Cuesta College, San Luis Obispo  
Fullerton Junior College, Fullerton  
Los Angeles Southwest College, Los  
Angeles  
Modesto Junior College, Modesto  
Moorpark College, Moorpark  
Mt. San Antonio College, Walnut  
Mt. San Jacinto College, Gilman Hot  
Springs  
Palomar College, San Marcos  
Pasadena City College, Pasadena  
Reedley College, Reedley  
San Diego Evening College, San Diego  
Santa Ana College, Santa Ana  
Taft College, Taft

#### **COLORADO**

Community College of Denver—Auraria  
Campus, Denver  
Community College of Denver—North  
Campus, Denver  
Southern Colorado State College, Pueblo

#### **CONNECTICUT**

Norwalk Community College, Norwalk

#### **DISTRICT OF COLUMBIA**

Mt. Vernon Junior College

#### **DELAWARE**

Delaware Technical and Community  
College, Wilmington

#### **FLORIDA**

Brevard Community College, Cocoa  
Hillsborough Community College, Tampa  
Palm Beach Junior College, Lake Worth

#### **HAWAII**

Leeward Community College, Pearl City

#### **ILLINOIS**

City Colleges of Chicago, Chicago  
College of Lake County, Grayslake  
Illinois Valley Community College, Oglesby  
Moraine Valley Community College,  
Palos Hills  
Sauk Valley College, Dixon  
Vocational-Technical Institute, Southern  
Illinois University, Carbondale

#### **INDIANA**

Indiana Vocational Technical College,  
Indianapolis

#### **IOWA**

Southwestern Community College, Creston

#### **KANSAS**

Pratt Junior College, Pratt

#### **KENTUCKY**

Henderson Community College,  
Henderson  
Jefferson Community College, Louisville  
Prestonburg Community College,  
Prestonburg  
Somerset Community College, Somerset

#### **MARYLAND**

Charles County Community College,  
La Plata

#### **MASSACHUSETTS**

Bristol Community College, Fall River  
Northern Essex Community College,  
Haverhill  
Worcester Junior College, Worcester

**MICHIGAN**

Alpena Community College, Alpena  
 Lake Michigan College, Benton Harbor  
 Lansing Community College, Lansing  
 Oakland Community College, Farmington

**MINNESOTA**

Lakewood State Junior College, White  
 Bear Lake  
 North Hennepin State Junior College,  
 Minneapolis

**MISSOURI**

East Central Junior College, Union  
 Florissant Valley Community College,  
 Ferguson

**MONTANA**

Dawson College, Glendale

**NEBRASKA**

Northeastern Nebraska College, Norfolk

**NEW JERSEY**

Essex County College, Newark  
 Mercer County Community College,  
 Trenton

**NEW YORK**

Manhattan Community College, New York  
 Maria Regina College, Syracuse

**NORTH CAROLINA**

Beaufort County Technical Institute,  
 Washington  
 Caldwell Community College and Technical  
 Institute, Lenoir  
 Durham Technical Institute, Durham  
 Edgecombe County Technical Institute,  
 Tarbou  
 Halifax County Technical Institute,  
 Weldon

**NORTH DAKOTA**

North Dakota State School of Science,  
 Wahpeton

**OHIO**

Community and Technical College,  
 University of Toledo, Scott Park  
 Campus, Toledo  
 Lakeland Community College, Mentor  
 Miami University—Middletown Campus,  
 Middletown  
 Ohio University—Lancaster, Lancaster  
 Raymond Walters General and Technical  
 Institute, Cincinnati

**OKLAHOMA**

Poteau Community College, Poteau  
 Tulsa Junior College, Tulsa

**PENNSYLVANIA**

Community College of Philadelphia,  
 Philadelphia  
 Harcum Junior College, Bryn Mawr  
 Mount Aloysius Junior College, Cresson  
 Northhampton County Area Community  
 College, Bethlehem  
 Williamsport Area Community College,  
 Williamsport

**TENNESSEE**

Walters State Community College,  
 Morristown

**TEXAS**

El Centro College, Dallas  
 San Antonio College, San Antonio

**VERMONT**

Green Mountain College, Poultney  
 Vermont College, Montpelier

**WASHINGTON**

Clark College, Vancouver  
 Grays Harbor College, Aberdeen  
 Highline Community College, Midway

**WISCONSIN**

Kenosha Technical Institute, Kenosha

**WYOMING**

Casper College, Casper

**OTHER**

Community College of American Samoa,  
 Pago Pago

## **APPENDIX C.**

### **Institutions Having Joint Library/Media Aide Programs.**

Actual program descriptions and course titles and/or outlines were *not* requested from the institutions listed here. Since programs change rapidly, information concerning the current existence or extent of programs at these institutions must be obtained from the institutions directly.

#### **ARIZONA**

Pima College, Tucson

#### **CALIFORNIA**

College of the Canyons, Valencia  
Modesto Junior College, Modesto  
Mt. San Antonio College, Walnut  
Mt. San Jacinto College, Gilman Hot  
Springs  
West Hills College, Coalinga

#### **GEORGIA**

Brewton-Parker College, Mount Vernon

#### **MASSACHUSETTS**

Bristol Community College, Fall River

#### **MICHIGAN**

Oakland Community College, Farmington

#### **MINNESOTA**

Lakewood State Junior College, White  
Bear Lake

#### **MISSOURI**

Jefferson College, Hillsboro

#### **NEBRASKA**

Northeastern Nebraska College, Norfolk

#### **NEW JERSEY**

Brookdale Community College, Lincroft

#### **NEW YORK**

Manhattan Community College, New York

#### **NORTH CAROLINA**

Caldwell Community College and Technical  
Institute, Lenoir  
Edgecomb County Technical Institute,  
Durham

#### **NORTH DAKOTA**

North Dakota State School of Science,  
Wahpeton

#### **OKLAHOMA**

Poteau Community College, Poteau  
Tulsa Junior College, Tulsa

#### **PENNSYLVANIA**

Northampton County Area Community  
College, Bethlehem

#### **TEXAS**

McLennan Community College, Waco  
Navarro Junior College, Corsicana