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ABSTRACT

This curriculum guide provides the framework for the Academic Internship Program (AIP) that is available to Charlotte-Mecklenburg (North Carolina) Public Schools' high school students. In each career area, information is provided to describe the purpose of the internship, the qualifications for the intern, the content/scope and competency goals for the internship, and vocabulary applicable to the internship. A preliminary section describes the three types of development that occur in a successful internship, the procedures used in developing internships, and the benefits of the AIP. Internship placement areas include accounting, advertising and public relations, art, architecture, banking, child development, computer services, dentistry, engineering, fashion merchandising, government, interior design, investment banking, journalism, laboratory technology, law, nursing, pharmacy, photography, physical therapy, physician, radio-television, radiology and emergency medical services, respiratory therapy, and veterinary medicine. Examples of how various community sponsors have scheduled their student interns are appended. (SI)

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The Academic Internship Program Curriculum Guide

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Charlotte-Mecklenburg Schools

Grades 10-12

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The Academic Internship Program Curriculum Guide



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September, 1986

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PREFACE

Included in this curriculum guide is the framework for many of the learning opportunities in the Academic Internship Program which are available to CMS high school students. In each career area, information is provided to describe the purpose of the internship, the qualifications for the intern, the content/scope and competency goals for the internship, and vocabulary applicable to the internship. A preliminary section to the guide describes the three types of development that occur in a successful internship, the procedure used in developing internships, and the benefits of the Academic Internship Program (AIP).

The AIP staff serve as the coordinators of the internship experiences. The internship coordinator works with students in planning worthwhile internship experiences and is available to assist teachers as they serve as teacher sponsors to their students participating in internships. The internship coordinator also serves as the liaison with the AIP's community sponsors.

New areas for internships are developed each year. The career areas described in this guide are the ones in which students are most frequently placed as well as the ones that coincide with the basic academic curriculum of our high schools. The descriptions compiled are from a number of different community sponsor locations and describe the individual internship categories in a generalized composite form.

It is hoped that curriculum/staff development personnel, principals, program specialists, and teachers will make suggestions about creating new internships or improving existing ones. These comments and/or suggestions should be made to the internship coordinators.

Three objectives emphasized by the Academic Internship Program are:

- To provide opportunities for high school students to explore areas of academic or career interests through the development of internship programs within local government and civic agencies and organizations, businesses, industries, and individuals.
- To establish positive relationships between the internship program and the school and the community.
- To enable students to earn credit for extracurricular experiences of an academic nature.

Other goals that the internship program seeks to accomplish are:

- development of good work habits
- personal growth
- strengthening of communication skills
- awareness of the community's vast resources and the world of work

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INTRODUCTION

INTRODUCTION

The Academic Internship Program which operates in all ten CMS high schools provides students the opportunity to explore areas of career or academic interest through internships in the community. More than 400 community sponsors are involved each year in placing over 600 students with government and civic agencies, businesses, industries, or individuals. The internship coordinators recruit appropriate community sponsors according to areas of career interest expressed by the students. In the internship program, each student is supported by a teacher sponsor, his community sponsor, and the internship coordinator. All three persons help the student to plan worthwhile objectives and learning activities to be accomplished during the internship. Each student keeps a journal. The journal and an evaluation from the community sponsor are given to the teacher sponsor for determining the final grade and credit. In order to be eligible for the grade of "A", each intern is required to complete a project related to the internship.

Students spend an average of six hours each week for a minimum of 45 hours. Students are not paid but receive academic credit. Internships are done after school usually two afternoons a week. Students provide their own transportation. Any high school student (sophomores must wait until second semester) is eligible to participate in the program. Most internships are done on a one-to-one basis. However, group internships are held in law, medicine, radio/television, and journalism, in addition to one-on-one internships in these areas.

One of the keys to the development of this program has been the enthusiasm of the students for this kind of learning experience and the positive response shown by those agencies, organizations, businesses, and individuals in the community who have agreed to sponsor high school students on internships.

PHILOSOPHY

While being exposed to and learning the basic academics, the internship program with hands-on and observational experience is an option offered to help educate high school youth. Since the ultimate goal of education is to help students develop a "whole brain" and put it to use for self development, personal aesthetics, and service to society, we, the AIP staff, feel that a student has a better opportunity to bring together all knowledge and understandings acquired through left and right brain stimulations in the classroom when the student can make application of that learning in real-life situations. We further believe that these real-life situations are found in the world of work and through interactions that are more cosmopolitan in nature than those found in schools alone. In the AIP, school taught subjects—English, Mathematics, Science, Social Studies, and Art—are put to the test of giving students an opportunity to answer questions and ask better ones. What better way can we assure our society of persons dedicated to the improvement of technology, for example, than to see to it that those pursuing the profession have experienced it?

Founded on the principle that any young person today has the right to explore the work he/she may do tomorrow or pursue academic interests beyond the school, the Academic Internship Program has been created as a supplement to formal classroom instruction. The classroom has been expanded into the community with its unlimited curriculum and vast state-of-the-art technological resources. The intent of the internship program is to add significantly to the vitality and impact of courses that a student has taken or will take.

DYNAMICS OF THE INTERNSHIP PROGRAM

WHAT ARE THE CHARACTERISTICS OF A GOOD INTERNSHIP?

I. There are three types of development that occur in experiential learning.

- A. Cognitive - Understanding begins when the student is able to present knowledge, analyze it, and apply it by taking action or making a decision to take action.**
- B. Personal - Students must explain his/her presence and purpose to others; gain their confidence and cooperation; and develop and maintain mutually acceptable relationships.**
- C. Moral - Commitment is made to certain principles and values guiding one's behavior.**

II. For an internship to be successful, students must have the opportunity to experience the following:

A. Cognitive

1. To use the knowledge, skills, and attitudes they bring to the internship.

Examples are students learning how to...

- develop an x-ray.
- mix and pour dental stone for an impression.
- transmit orders for customers at an investment banking house.
- conduct marketing surveys for a bank.
- stain slides in a hospital laboratory.

2. To move to the next level of challenge within a placement or a subsequent placement.

Example. A student at the beginning of her pharmacy internship watched how IV's were made. By the time this student finished her internship at the hospital pharmacy, she was making IV's, compounds, and filling prescriptions.

It is important to have just the right amount of challenge in an internship—too much difficulty and the student is disturbed; too little challenge and the student is bored. In the AIP, there is a low drop-out rate.

3. To question, challenge, test, and apply new learning.

Examples.

- Student working with the Adult Parole Department who wrote in his journal, "I'm getting to the point where I don't believe I want to be a probation officer".
- Journal quote of an intern, "I was given the freedom to take on as much work as I wanted, but I was always allowed to refuse responsibility when I thought I had more than I could handle".

Many times the rapport that sets up between the community sponsor and student intern dictates the content of the learning experience. Good rapport can lead to experiences that would never have been anticipated.

B. Personal

1. To grow in self esteem and self direction.

Example. "The center is proving beneficial for myself as well, I think. When I get really involved with the kids I forget my own problems.", an entry in an intern's journal.

2. To carry out assigned responsibilities and take on new ones; participate in the decision making process.

Examples are quotes from internship journals. "In my internship at the Speech and Hearing Center, I realize I have more patience than I thought. I found I can be as patient as you want me to be. You really want to help those people as much as you can."

"In my internship in archeology, I learned I could do more than I thought I could."

C. Moral

1. To develop perspectives.

Examples are from the journal of a student who was interning in emergency medicine.

"I learned how important the drunk driving law really is when I saw a husband and wife killed by a drunken motorcyclist."

The student wrote about another experience: "I grabbed up the stretcher with the help of another medic. When we walked in, the place smelled awful. A lady showed us to the bedroom; the sight was terrible. One guy lay slumped over the bed, a puddle of blood under him and another had one side of his head gone. I couldn't stand the sight. I had to go back to the ambulance to catch my breath. I thought for a while about the situation and realized for the first time I had experienced the sight of death and its realities and also the importance of life."

2. To collaborate with others and be exposed to various points of view.

Example. A dental student intern wrote in his journal, "Dr. Pierce told me that often a dentist can do an excellent job with a filling. However, he will get no more recognition than a dentist who simply fills the tooth, but does not work hard to shape it right because no one knows the difference. The dentist needs the highest morals to do his/her best for the patient always."

III. Summary

The following statement from a law intern's journal sums up how development has taken place in all three areas—cognitive, personal, and moral. (Student intern was evaluating the effectiveness of the judicial system).

"The problems of the court system are no less complex than the problems of the people with whom it must deal. We certainly do not yet know all the answers, but did we ever stop to think—are we asking the right questions?"

WHAT IS THE PROCEDURE USED IN DEVELOPING INTERNSHIPS?

I. Three major persons support the intern.

A. The teacher sponsor

(One of the student's teachers chosen by the student to discuss with the student relevant subject matter covered during the internship, to read and sign the student's journal, and to assign credit and a grade at the conclusion of the internship. Usually, the teacher sponsor represents an academic area related to the internship experience. For example, a science teacher usually sponsors a medical intern.)

B. The community sponsor

(The supervising person at the internship site.)

C. The intern coordinator

(These persons identify organizations and businesses that will work with the AIP, arrange student/community sponsor interviews, help students work out objectives for their internships, help determine internship schedules, and monitor activities among the teacher sponsor, community sponsor, and student.)

II. Students learn about the Academic Internship Program in various ways.

A. Once a week an intern coordinator is available to students at each school during lunch periods.

B. Intern coordinators often get into classes to explain the details of the program to the students.

C. Teachers, counselors, and appointed liaison persons inform students about the existence of the internship program.

D. Participating students inform their friends about the program.

III. Learning activities are recorded during an internship.

A. Interns keep a time sheet and a daily or weekly journal of their activities during an internship exposure.

B. Interns record and define terminology relevant to the jargon of the business in which they are working.

IV. Group internships exist and differ slightly from the usual one-on-one internship.

A. Group internships occur when fifteen or more students meet simultaneously and on a weekly basis to learn about a particular career.

B. Various lawyers, doctors of medicine, journalist personnel, and radio/television personnel conduct seminars on a given schedule to inform students about their professions.

C. Group interns engage in special written assignments and oral discussions.

D. An intern coordinator meets with group interns during each session to check rolls and to impart pertinent information.

V. Interns are visited and monitored during their internship exposure.

- A. AIP board members and intern coordinators visit many of the interns at the internship sites.**
- B. Intern coordinators are often in touch with community sponsors, interns, teacher sponsors, and parents of interns via telephone.**
- C. The teacher sponsor, community sponsor, and intern coordinator read and sign the intern's journal at least twice during the internship.**

VI. Evaluations are completed.

- A. Using a special form provided by the AIP, the community sponsor evaluates the intern.**
- B. Using a special form provided by the AIP, the intern evaluates his internship experience.**
- C. The teacher sponsor considers the evaluations, journal, and any special project the intern has made before assigning credit and a grade.**
- D. Intern coordinators arrive at grades for group interns.**

INTERNSHIP PROCESS

I. Student Applies

May receive application from intern coordinator, teacher, or counselor.

Student talks over his reasons for having an internship with the intern coordinator.

Intern coordinator reviews the student's commitment and responsibility in having an internship.

II. Community Sponsor Contacted

Intern coordinator explains the intern program.

Community sponsor is invited to participate in the Academic Internship Program.

III. Interview

Involves the student intern, community sponsor, and intern coordinator.

Student and sponsor test their compatibility.

Objectives and activities for the internship are spelled out by community sponsor and student intern.

Hours, schedule, and responsibilities of student intern are established.

Academic Internship Student Commitment is signed.

IV. Conference with Teacher Sponsor

Intern coordinator notifies teacher sponsor of placement and student contacts teacher.

Teacher sponsor reviews objectives and activities of internship making changes, additions, etc.

Teacher and student decide on evaluation procedure: keeping a log, making class presentation, completing a project.

The amount of academic credit to be received is established.

Kind of grading is determined.

V. Internship in Progress

Student intern keeps in close contact with teacher sponsor (contact at least once a week).

Intern coordinator is notified if any problem arises by either the community sponsor, teacher sponsor, or student intern.

Intern coordinator or AIP advisory Board member often visits student interns at the site.

Student interns are encouraged to contact their intern coordinator periodically to discuss their progress.

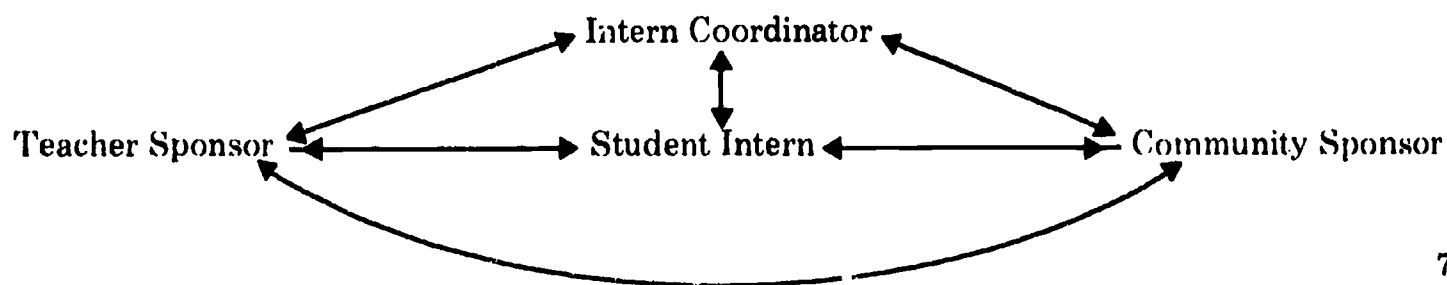
VI. Evaluation Procedure

Community sponsor and student intern complete evaluations on each other at the end of the internship and review them together.

Community sponsor mails his evaluation to the internship office and the student intern gives his journal to his intern coordinator.

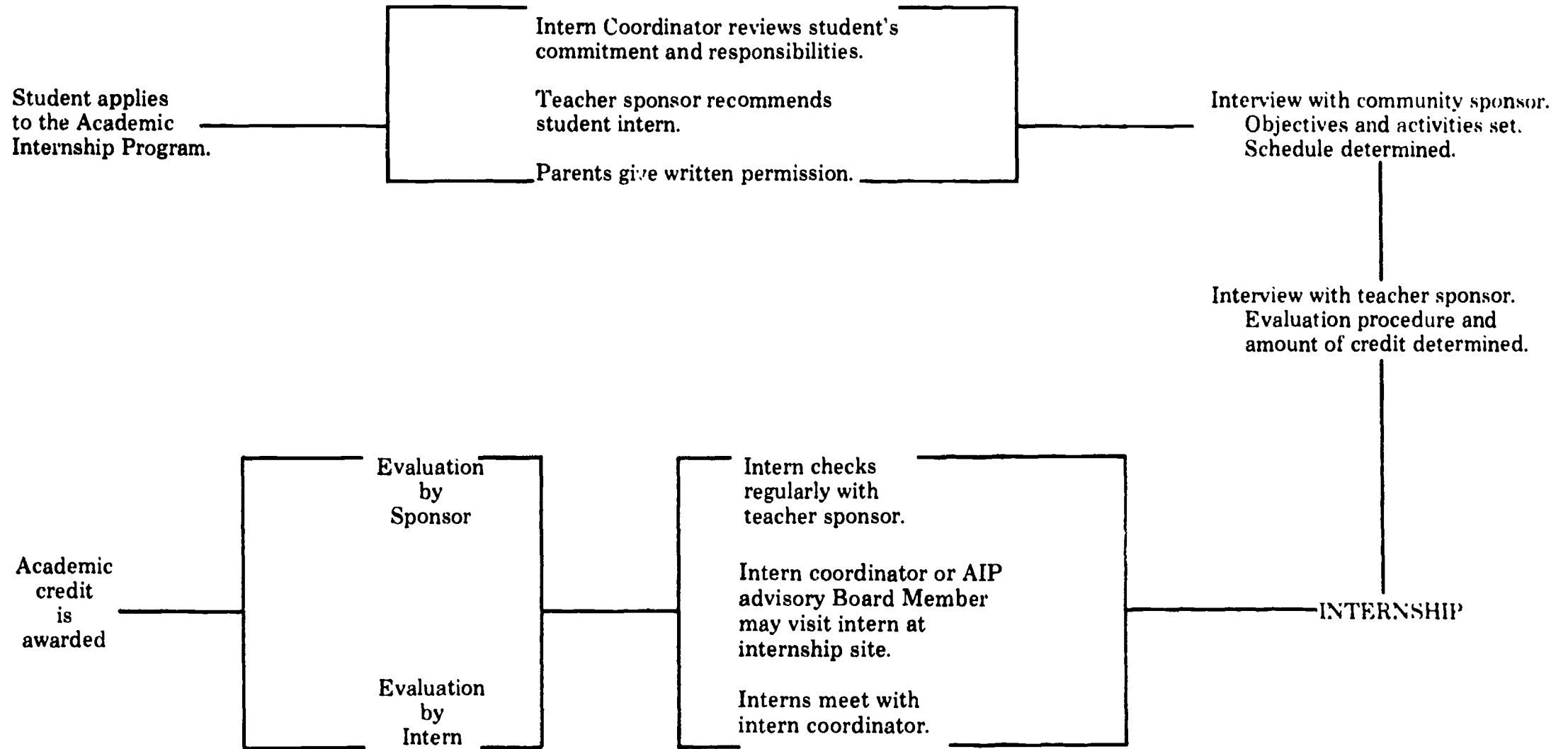
The evaluation and journal are given to the teacher sponsor.

Proper academic credit is awarded.



ACADEMIC INTERNSHIP PROGRAM

FLOW CHART



WHAT ARE THE BENEFITS OF THE INTERNSHIP PROGRAM TO THE STUDENTS, SCHOOLS, AND COMMUNITY?

I. Benefits to the Students include:

- A. **Realistic View** - Students gain a more realistic view of a career area that they could not experience through the average teenage job. They become involved behind the scenes to learn more about the total operation of the organization. A realistic view of a career area might result in a student discovering a particular field for him was **not** what he wanted. This experience is valuable because financial resources and time have not been wasted in this direction.
- B. **Better Career/College Choice** - Students make better decisions about further education and which college to attend.
- C. **Potential Employment** - Internships often lead to part-time or summer jobs. Examples: One of our Group Journalism students was hired by East Woods Press Publishing Company, and Mecklenburg Day Services plans to hire a Harding student when she reaches eighteen years old in January.
- D. **Contacts/References** - Important contacts and recommendations for college programs or scholarships benefit student interns. Example: Women In Communications, Inc. for the first time gave a \$300.00 scholarship to a West Mecklenburg student. This student plans to attend UNC-CH and major in Communications. She credits her two group internships in Journalism and Radio/Television with helping her get her scholarship.
- E. **Practical Experience** - Practical on-the-job training reinforces classroom instruction. Students strengthen academic knowledge and skills by developing good work habits, becoming more articulate in communication skills with sponsors, dealing with the public, or relating to teacher sponsors at their high schools.

II. Benefits to the Schools include:

- A. **Public Relations Ambassadors** - Students are public relations ambassadors for the schools.
- B. **Classroom Enrichment** - Students may invite a community sponsor to be a guest speaker in the classroom or the intern may give an oral presentation about the community experience.
- C. **Community/School Link** - "The Great Exchange Program" expands the classroom into the city with its unlimited curriculum and vast resources. The AIP was founded on the principle that young people today have the right to explore the work they may do tomorrow or pursue independent study projects beyond the schools. The community has responded with open arms.
- D. **State-of-the-Art Exposure** - Students are exposed to complex technological equipment and environments not found in the classroom.
- E. **Contributed Value - \$350,000+** - In a Cost Benefit Analysis completed in 1981-82 the Charlotte community contributed \$351,975 and over 27,000 hours to 621 high school students on internships. This figure is based on an estimate given by Chamber of Commerce of \$13.00 per hour for community sponsors in this program.

III. Benefits to Community Sponsors:

- III. A. Attracts Future Employees** - Community sponsors have the opportunity to assess a student's capabilities--which can lead to part-time jobs or summer jobs while the student is in college. Employers see interns as potential employees already trained in entry-level skills.
- B. Positive Public Image** - Companies feel participation is a corporate responsibility to the community and they take civic pride in being a part of the AIP.
- C. In Touch with Youth** - Some employers feel their employees know their job better if they are communicating to young people about their work.
- D. Promotes Profession/Occupation** - Some employees feel through this program, students can be informed and attracted to a certain field or profession. Example: General Motors Institute is very interested in promoting engineering internships with our high school students. Their dropout rate in their college Co-op Program is 25%. They feel if students begin early to learn about engineering, the dropout percentage in college will be considerably less.

INTERNSHIP PLACEMENT AREAS

ACCOUNTING

Overview

To make important decisions, managers of businesses must have up-to-date financial information. Auditors and/or accountants prepare and analyze financial reports that furnish needed information to executives.

Depending on the needs and desires of students who are interested in having internship experiences in accounting, the AIP staff places students with certified public accountants, management accountants, or certified internal auditors in large and small businesses. An example of where the kinds of accountants listed above may be found are Ernst and Whinney, School Workers Federal Credit Union, and Boulogny Corporation, respectively. In any such firms, interns will be exposed to a busy financial concern from a variety of perspectives and will actually participate in the functions of the accountants.

"Persons planning a career in accounting should have an aptitude for mathematics, be able quickly to analyze, compare, and interpret facts and figures, and to make sound judgements based on this knowledge." (Occupational Outlook Handbook)

Content - Scope

Forty-five to ninety hours of exposure in accounting procedures provide an opportunity for students to observe activities and have hands-on experiences which may deal with credit, budgeting, inventory control, loan procedures, accounts payable, accounts receivable, tax return preparations, and auditing. In addition, students are exposed to basic words and terminology relevant to the particular business where they are placed as well as to the particular financial transactions carried on at that business.

Competency Goals

1. The intern will develop an understanding of the various aspects of accounting.
2. The intern will work with the mathematical auditing of various accounts.
3. The intern may learn how to open member accounts and disburse loan funds.
4. The intern will help set up schedules, worksheets, and other financial statements.
5. The intern will monitor the functions and procedures of at least one board meeting or business meeting.
6. The intern will define basic words and terminology relevant to accounting jargon, and he will demonstrate his/her understanding of the terminology when he/she discusses his/her internship with his/her teacher/sponsor, community sponsor, and intern coordinator.

Vocabulary

MCS - (management consultant services).

Attest function - To express opinion as to fairness or unfairness of a company's books.

Internal auditors - Persons who work systematically on or who watch over books within a company.

Public accountants - Accountants who own their own businesses or who work for accounting firms; usually referred to as CPA's.

Management accountants - Persons who handle the financial records of their companies; also known as industrial or private accountants.

Government accountants - Auditors who examine the records of government agencies and audit private businesses and individuals whose dealings are subject to government regulations.

Audit - An official examination of an account book.

Dividends - A share of money distributed; a share in profits.

Interest - The amount of money paid for the use of a loan.

Loan contract - An agreement between two or more persons for the borrowing of money.

Delinquent - Being overdue in payment.

Share (savings) - A portion of a property or invested capital.

Accounts payable - An account of money that has to be paid out.

Accounts receivable - An account of money to be collected.



Advertising

ADVERTISING/PUBLIC RELATIONS

Overview

The internship in advertising or public relations involves the student in one of several different types of businesses or organizations. These internships range from the advertising department of the local newspaper, an advertising company, the creative services division of a broadcasting corporation, a graphics shop, the communications department of a large organization, to the public relations office of an arts organization such as the symphony or the opera.

Learning experiences can include writing press releases, working on fund raising campaigns, shooting pictures, designing logos and advertisements, doing paste-ups of advertisements and brochures, and attending meetings with clients.

Although not required, it is helpful if the student applying for an internship in the area of advertising has taken course work in art, drafting, advertising, or graphics.

Content - Scope

The student interested in advertising and/or public relations will experience a variety of activities depending upon the site of the internship. In the advertising company or department, the student learns about brochure, film, or slide show production, animation drawing techniques, layout procedures, testimonial editing, and client relationships. In addition to these experiences, a student can learn how to write press releases, work with advertising campaigns, organize artist receptions, and observe the organization of a concert series in the symphony or opera organization. In the creative services department of the broadcasting company, the student learns how to produce weather graphics, promotions for television shows, advertisements for events, and how to project a good image for the station.

A student may intern from 45 to 180 hours depending on the student's interest and the time allowed by the community sponsor.

Competency Goals

1. The student will learn about the over-all purpose of the advertising or public relations department for the organization that sponsors the internship.
2. The student will learn techniques of layout design, photography, film and copy editing, animation, basic lettering, and arranging slide shows.
3. The student will learn how to produce films, logos, brochures, and advertisements.
4. In the public relations internship, the student will learn how to write press releases, work with agents, organize an advertising campaign, and assist the marketing director.
5. The student will be exposed to the important factors in developing and maintaining good client relationships.
6. The student will learn about career opportunities in advertising and public relations and the educational background required to pursue careers in these fields.

Vocabulary

Logo - A visual symbol of the company or organization.

Promo - A promotion for a certain event.

Tease - Time when a little bit is told about something that is coming up later.

Animation - The giving of movement to stationary objects; single framing live action, drawings, or objects.

Cel - An animation frame.

Editing - The choosing and elimination of material to make the final presentation.

Direct mail - A form of advertising in which one targets his potential market through the mail.

Layout - Graphic design of printed material.

Paste-up - Setting down type, drawings, or material on boards so it can be printed.

Camera ready art - Art ready for the printer to photograph and then print.

Stat - Process of enlarging or shrinking a print of an original.

Justified - When type is even on the left and right sides.

Crop marks - Symbols that tell the printer where to cut.

Visual - A homemade copy of how the final printing will look.



Architecture

ARCHITECTURE

Overview

Architects not only design carefully scaled plans for beautiful buildings, but they also "provide a wide variety of professional services to individuals and organizations planning a building project." From discussions with clients about purpose, requirements, and cost to site inspection after the building is under construction, the architect continuously has input. Therefore, high school students interested in preparing themselves to study architecture may begin by doing well in general academic courses. Languages, history, social studies, mathematics, art and mechanical drafting are the kinds of courses that prove helpful for this career.

Content and Scope

Architectural firms that open their doors to high school interns provide opportunities for observation and hands-on experiences. These experiences usually include basic exposure in architectural or engineering drafting, production work, model making, site inspection, and client-architect interaction. Internships vary in length from 45 to 180 hours. During this time, the interns get a rudimentary introduction to the following competencies:

Competency Goals

1. The intern will observe office procedures, various phases of drawings and designs as well as architects at work on projects.
2. The intern will assist with the basics of "presentation" drawings. This includes lettering, designing, blue line printing, xerographic printing, and model building.
3. The intern will learn the basic concepts of designing.
4. The intern may develop a project in accordance with his ability and area of interest, such as a small house, a garage, a shop or single space buildings.
5. The intern may visit sites of construction and observe site inspection.
6. The intern will define words and terms which apply to various architectural activity and demonstrate his/her understanding of them when he/she discusses his/her internship with his/her teacher sponsor, community sponsor, and intern coordinator.

Vocabulary

Blue prints - Copies made from mylars on a special type of paper.

Mylars - A clear sheet of plastic material on which architects draw the buildings after drawing them on the grid paper.

Grid paper - Very large sheets of graph paper on which originals are drawn.

Barrier free designs - Making special allowances in areas such as doorways and bathrooms for handicapped people.

Plumbing, mechanical, electrical, architectural, structural - Specialized engineering portions of buildings that are included in a set of construction documents or drawings.

Title blocks - A portion of a sheet of drawings designated for titles, name of architect, name of firm, dates, and client.

S P E C S - Short term for specifications which is a written description of all materials in a building project.

M.E.P.S. - (mechanical, electrical, plumbing, and structural engineers).

C.A.D. - Computer-aided design machines that can do the work of draftspersons.

Fenestration - A term used to describe openings in a buildings exterior wall such as doors, windows, and balconies.

Topography - A description for the contours of the land or site upon which a building will be constructed.

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Art

31

ART

Overview

Internships in the art fields vary widely according to the community sponsor. An internship site is chosen based on the student's interest. For example, a student interested in art exhibitions could be placed with the exhibits curator at the museum of art. Another student who is interested in music or theater arts may intern with various theater groups, the Community School of the Arts, the opera or the youth symphony. Placements with the administrative offices of the performing arts organizations such as the symphony or the opera offer students an exposure to public relations, ticket sales, fund raising, and press releases.

It is hoped that students involved in art internships are exposed to careers in the arts without necessarily being performers, producers, or directors.

Content - Scope

Internships in the arts can provide the student intern with a wide range of experiences. At the symphony the student works as an assistant to the marketing director, writes press releases, helps produce concerts, and works on advertising campaigns. At the Community School of the Arts, the intern assists teachers of art, music, and ensemble classes and helps in the office. A student working at the art museum learns how to mount exhibits. In an opera internship, the student works in the backstage production of a show and sometimes has the opportunity for participation in the show itself.

Internships range from 45 to 180 hours depending upon the student's interest and availability of the community sponsor.

Competency Goals

The following competency goals depend upon which community sponsor in the arts is involved in the internship. Competency goals vary depending on the community sponsor and emphasis of the internship according to the student's interest.

1. The student will assist in putting on productions by working in set preparation, learning wardrobe and make-up techniques, and/or participating in acting roles.
2. The student will learn about writing press releases, working with guest artists' agents, developing a file on program rates, participating in an advertising campaign, organizing receptions, and working in the back office.
3. The student will assist with the instruction of individuals or classes in art or music.
4. The student will help in the production of events with an art theme such as a springfest.
5. The student will learn techniques of presenting an art exhibit.
6. The student will learn how to install an exhibit including how to mat, frame, catalogue, and pack various paintings.

Vocabulary

Counterpoint - Rules for writing melodies.

Tonic - First note of a scale.

Negatives - Silhouettes of people cut out so the shape of the paper being cut is used.

L M - (literature and music).

Wings - The sides of the backstage after the props are set up.

Sitzprobe - German term meaning a sit-through rehearsal involving singers and orchestra.

Spritzing - Spraying water in the air to keep the dust down on stage.

Mark - Spot where you stand on stage that is "marked".

Upstage - Towards the back of the stage away from the audience.

Downstage - That part of the stage closest to the audience.

Stage right - Right of the stage as one faces the audience.

Stage left - Left of the stage as one faces the audience.

Supernumeraries - People who act as "extras" and are paid in the form of complimentary tickets.



Banking

34

BANKING

Overview

Students interested in business and the field of finance and banking would enjoy exploring the wide variety of activities offered in this internship. Expanded banking services and the increasing dependence on computers will require sound management and effective quality control.

Because of the specialized nature of banking, there are many roles to explore. Among them are such areas as the corporate communications area, personnel, international banking, marketing and research. In addition, students might wish to explore the work of bank tellers, branch managers or loan, trust, and operation officers.

The content of this career interest area would appeal to students studying business, math, or economics in the curriculum.

Content - Scope

This internship exposes the student to a wide variety of departments and functions within the banking industry. These include: market research, audit, branch banking, corporate communications, revolving credit (interbank cards), management services, deposit accounting, bank real estate, Charlotte consumer marketing, international division, teller training, and general services (copy center, word processing, telecommunications, print shop, mailroom, and purchasing).

Competency Goals

1. The intern will file, type, add checks, and work with computer printouts and video tapes.
2. The intern will observe work done by tellers, customer service representatives, loan operators, and bank managers.
3. The intern should be prepared to assist personnel with the application of loans and filing current customer reports.
4. The intern will research industries for the bank and update information files on companies used by bank account officers.

Vocabulary

Interest - Price paid for the use of money or credit.

Dormant account - An account that has shown no activity, either by increase through deposits or decrease through withdrawals over a period of time.

Federal Reserve System - Central banking system of the United States

Liabilities - Funds a bank owes; deposit funds which are assets for customers.

DDA - (Direct Deposit Account).

IRA - (Individual Retirement Account).

ICR - (Instant Cash Reserve) - Protection against overdraft or having to keep a minimum balance in an account.

Now Account - Checking account that pays interest and gives extras as free checks.

NSF - (Non-sufficient Funds).

Terminals - Computers that read microfilm.

Mini Bank - Terminals operated when bank card is inserted.



Child Development

37

CHILD DEVELOPMENT

Overview

A child development internship covers, not only child care centers for children of working parents or full time students, but also includes those agencies specializing in the educational needs of the emotionally disturbed, severely handicapped, and retarded adults and children. Student interns may choose to work in educational or recreational therapy at such agencies as Alexander Children's Center; The Relatives, a crisis intervention center where interns assist regular staff and offer suggestions to new residents; United Cerebral Palsy Development Center with children two to five years of age learning physical therapy and speech therapy as well as CMS Extended Day Programs.

The ultimate goal of child development is to provide a caring, happy, and stimulating environment for each child. Experience in activities with children and an interest in counseling or education will be helpful in all these internships.

Content - Scope

Internship exposure in child development will include tutorial and enrichment programs. Interns will work with students in drama, music, arts and crafts, reading, math, science, and recreational activities such as games and swimming.

Length of commitment will be approximately 90 hours with renewal option for as much as 180 hours. Community sponsors stress that students be mature, show a genuine interest in children as well as have a high degree of dependability and responsibility.

Competency Goals

1. The intern will work with children of varying age groups nurturing and supervising their activities.
2. The intern will listen to students read, prepare and play games, decorate bulletin boards, and participate in musical activities, finger painting, and puppetry.
3. The intern will observe classroom personnel or counselors in their roles and may feed the children their meals or snacks.
4. The intern should be willing to work hard and care for the personal needs of the children.
5. The intern will be encouraged to be involved in all activities and assist the staff with the daily routine of program operation.

Vocabulary

Sign language - To use the hands as a way to communicate to the deaf and blind.

Cerebral palsy - Several disorders of the central nervous system resulting from brain damage during or before birth; causes a defective motor ability.

Handicap - To be physically disabled or mentally retarded.

Mental Retardation - A significantly subaverage general intellectual functioning, existing with deficits in acceptive behavior and manifested during development period.

Therapist - A specialist who treats disease of any physical or mental disorder by medical or physical means.

Time out - Time for the child to sit and be quiet until told by a teacher to move; a method of discipline used in child care centers that gives the child time to think about what happened.

Self concept - Mental picture of oneself.

Cooperative play - Playing together with friends.

Parallel play - When children play near each other but not together.

Solitary play - To play alone.

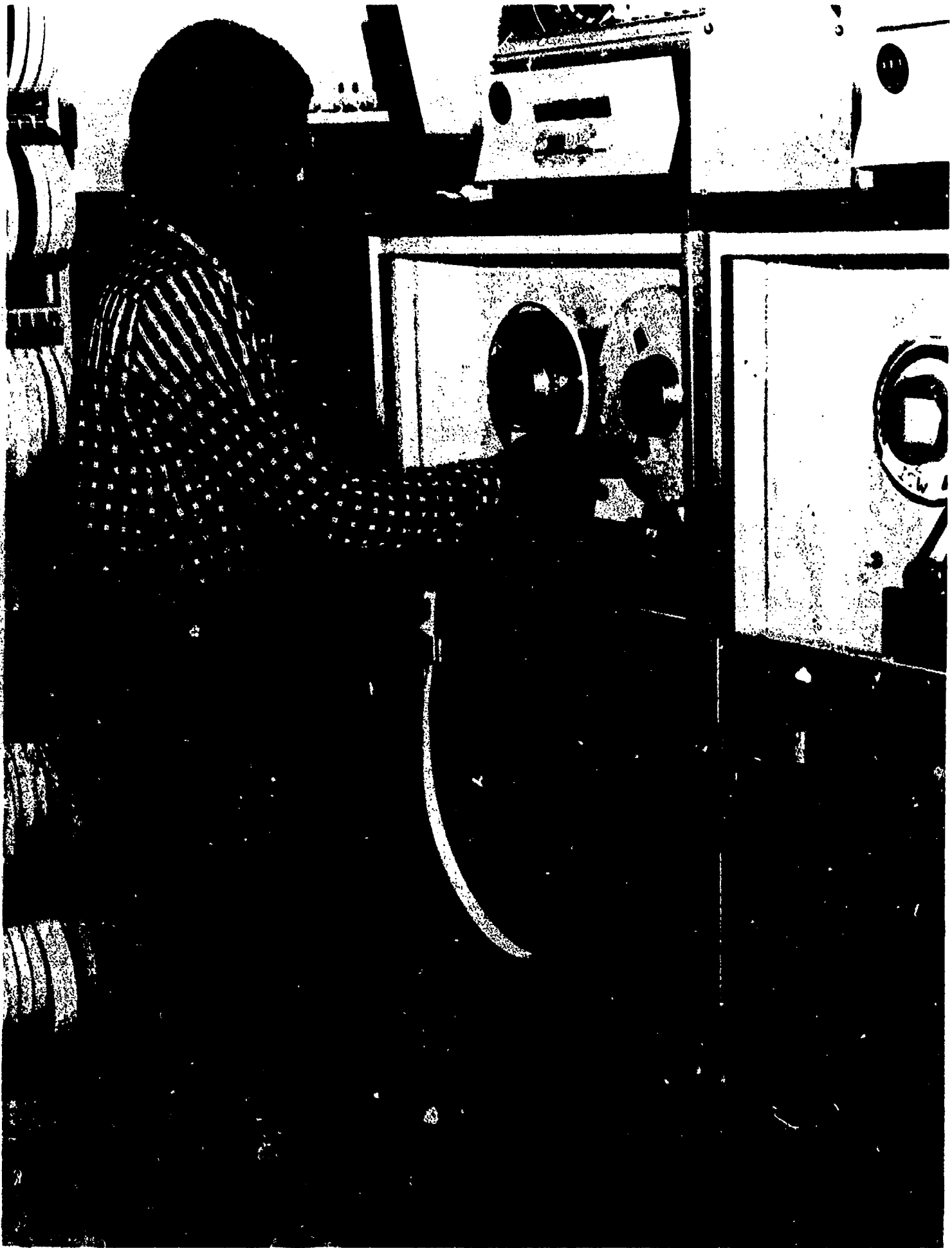
Staffing - A meeting with a child's counselor, therapist, and other staff every six weeks to discuss the development of the child.

Respite - A program devised to relieve parents of the tasks of taking care of their disabled child.

Spasticity - Overactive muscle response when one pulls quickly on a limb.

Hyperfunctional - Exceptionally intelligent over other classmates with the same mental or physical handicap.

Socially handicapped pupils - Children who are not working at normal grade level because of improper or insufficient instruction, physical defect, poor home, or neighborhood conditions.



Computer Services

COMPUTER SERVICES

Overview

Academic internships in computer programming and data processing expose the student to different jobs available in computer services—programming, key punch, computer work, and operation of all facilities. The student has a look at management decisions and minor problem solving in the training sessions. An attempt is made to provide the intern with an overall view of the company.

Some companies prefer seniors with higher math courses or good math and electronics background. Basic data processing knowledge is also desirable. A programmer needs to have above average intelligence, and a logical, analytical approach to solving problems. Patience, persistence, close attention to accuracy and details, good imagination, spatial ability, and manual dexterity are needed. Key punch and computer operators must be able to work under pressure. All students exploring this internship should be mature, responsible, and meet the necessary academic requirements by community sponsors.

Content - Scope

Computer service internships include exposure to many varied industries—for example, public utilities, computer processing services, banks, Charlotte-Mecklenburg Schools, retail grocery chains, department stores, manufacturing and development of terminals, specialized industry systems, communication systems, the science museum, and a university chemistry department.

The length of these internships extend from 45 to 180 hours. Activities interns may observe and activities of a "hands-on" nature vary from one sponsor to another. Students may operate microfiche composers and duplicators, hang tapes on large batch processors, observe console managers who control large computers, and observe library functions and procedures.

Competency Goals

1. The intern will mount tapes, catalog tapes, put paper in printers, and clean tape drives.
2. The intern will have an opportunity to develop microfilm and distribute work.
3. The intern will operate mini computers including printers, card punch devices, card reader devices, and paper tape readers.
4. The intern will observe network control center, operations, supervision, scheduling, programming, and check sorting.
5. The intern will keypunch data for the company, type, file, and observe overall data processing functions and equipment.
6. The intern will have access to an individual terminal and using computer commands will complete a program or write a manuscript.
7. The intern may observe a programmer analyst for the purpose of making software changes.

Vocabulary

Input - Data to be processed and the instructions for the computer which may be punched cards or on perforated or magnetically printed tape.

Programmers - Persons who translate information or a problem into a program which is a step-by-step set of instructions expressed in a code or computer language.

Keypunch operators - Data entry personnel who prepare input.

Console operators - Personnel who monitor and control computers to process the data or input and deliver the desired results or output. In running a program, operators follow the written instructions of the computer programmer.

Tape librarians - Personnel who classify and catalog data on punched cards, magnetic tape, or disks and maintain files of current and previous versions of programs, listings, and test data.

Scratch tapes - Tapes erased which may be reused.

Catalog - List of tapes with old data (They are pulled off the racks to be used as scratch tape.)

Software - All the programs and related methods required to record and manipulate data in a computer.

Hardware - The physical equipment or devices forming a computer and peripheral equipment.

Batch processing - A technique by which items to be processed must be coded and collected into groups prior to processing.

Downtime - The period during which a computer is malfunctioning or not operating correctly due to mechanical or electronic failure.

Debug - To diagnose and correct computer malfunctioning or mistakes in programming.

DENTISTRY

Overview

Internships in dentistry are designed to give students an overview of all areas of a dental practice. Students spend time assisting and observing patient seating, patient management, cleaning and fluoride treatments, dental x-rays, tray set-up, tray clean-up, scheduling patient recalls, root canal work, tooth extractions, fillings, and oral surgery. Interns are placed in various professional settings such as private practice, the public dental clinic, or pediatric dental practice. Many dental interns are given the opportunity to visit the School of Dentistry at UNC, Chapel Hill, N.C. to find out from the Dean of Admissions the requirements for admission to the Dental School.

Content - Scope

The dentistry internship offers the student a broad exposure to dental procedures in all phases with some assisting experiences provided when possible. The student will observe and participate in the day to day activities of a dentist including hands-on tasks such as tray set-ups, fluoride treatments and x-rays, and observing activities such as oral surgery, denture preparations, and filling of cavities. Internship activities vary according to whether the placement is with a pediatric dental practice, a public dental clinic, or a regular private dental practice.

A student may intern from 45 to 180 hours depending on the student's interest and the time allowed by the community sponsor. The student should have a professed interest in the pursuit of a dental career such as a laboratory technician, hygienist, assistant, receptionist, or dentist. The student is usually a junior or senior with an interest in science.

Competency Goals

1. The student will learn about the various aspects of a dental practice by participating in an orientation to the dental clinic, observing office activities and instrumentation location, and involvement in chairside assisting.
2. The student will learn how to prepare trays, clean instruments, carry out certain dental procedures like suction, clean teeth, apply fluoride, recall patients, develop x-rays, perform small errands, and file records.
3. The student will observe oral surgery, root canals, tooth fillings, tooth extractions, skull identification, amalgam and composite restorations, and orthodontic work.
4. The intern will be able to discuss various dental careers, opportunities for future employment, and education requirements with the dentist, dental hygienist, laboratory technician, or receptionist.
5. The student will visit the UNC Dental School to tour and talk with the Admissions Office regarding requirements for admission to dental school.

Vocabulary

Articulator - Artificial jaw.

Silicone rubber - Type of impression material.

Hemostat - Device used in inserting sutures.

Elevator - Device used in extracting teeth.

Bite wings - X-rays of back molars.

Panorex - X-ray machine that circles the head for overall view of the mouth.

Flouride - Strengthener for teeth.

Extractor - Plier like instrument used to remove teeth.

Carver - Used to smcooth fillings.

Abcess - When disease reaches pulp.

Crown - Top and outer layer of tooth.

Dentin - Layer under crown.

Pulp - Layer containing nerves.

Root canal - Operation where nerves are removed and amalgum used.

Points - Gum substances which are used in root canal.

Denture - Operation where false teeth follow full extraction.

Sodium hypochloride - Rinsing compound.

Maxilla - Upper jaw.

Mandible - Hinge bone in skull.

Xylocaine - New drug taking place of novacaine.

Anterior - Frontal teeth.

Posterior - Back teeth.

Amalgam - Filling material.

Palate - Roof of mouth.

Rugae - Ridges in palate.

Fovea palatini - Two saliva holes in palate.

Orbicularis oris - Muscle controlling lips.

Explorer - Instrument used to find cavities, etc.

Filling - Contains silver and mercury.

Prophylaxis - Cleaning.

Occlusion - Bite.

Brackets - Small metal pieces used as a basis for braces.

Occlusal, buccal, lingual - Tooth surfaces.

Pulpotomy - Operation performed when decay reaches nerve of tooth.

Acid etch - Process used in etching the tooth surface for placement of brackets.

Bur - Small bit used with handpiece which cuts decay from teeth.

Handpiece - Tool powered by air used to "wash" cavities with the use of metal bur.

Distal - Section of the mouth which is toward the back of the mouth.

Dycal - Coating applied before filling.

Autoclave - Machine used to sterilize instruments.

Automatic processor - Machine used to develop x-rays.

Rubber dam - Used to isolate tooth.

Sodium pentothal - Used to put patient to sleep.

ENGINEERING

Overview

Internships in engineering can involve students in several areas of engineering such as mechanical, design, or electrical or the internship may provide a student with an overview of one particular kind of engineering such as a civil engineering internship.

Engineering internships take place in various kinds of corporation or businesses such as local utility companies, manufacturers of computer equipment, chemical industries, and electronic or automotive companies.

Student interns should be juniors or seniors with a preference for second semester juniors or seniors. Students should be responsible, mature, and show a definite interest in the higher math and science related courses. The student choosing an engineering internship is expected to have a desire to learn about this field. Being a self starter, inquisitive, and capable of doing recommended reading and study is helpful to the student participating in an engineering internship program.

Content - Scope

The engineering internship involves the student in many different types of engineering, or the student may concentrate on one particular area depending on what type of community sponsor is used. The student will receive an overall view of the principles of engineering by observing and/or performing hands-on tasks such as developing a computerized circuit simulation program, improving drafting skills, designing an auxiliary power supply for a spare transformer, shadowing a manufacturing engineer, performing a chemical lab analysis, or operating an IBM personal computer and the CADAM (mechanical design system).

Internships last from 45 to 180 hours depending upon the particular sponsor used. In addition to observing and performing hands-on tasks, students are involved in field trips, internships projects, and decision-making meetings.

Competency Goals

Mechanical Engineering

1. The intern will be introduced to various groups in the mechanical-nuclear division such as projects design, piping/model shop, analysis, stress supports, fossil unit, station support, and field trips.
2. The student will observe different types of mechanical engineering problems and solutions for them.
3. The student will improve drafting skills by working on various drafting assignments.
4. The intern will work in the card assembly engineering department and assist manufacturing engineers.

Electrical Engineering

1. The student will analyze the parameters of a typical sump pump control problem.
2. The student will design an electrical control circuit.
3. The intern will understand the development of all necessary documentation to translate engineering concepts into field drawings.
4. The student will write a computer program to simulate a motor operated valve circuit.

5. The intern will observe the two dimensional reproduction of designs and layouts by computers in reprographics.
6. The student will observe the design of new advanced technology products.
7. The student will operate a computer, word processing terminal, and the CADAM (mechanical design) system.
8. The student will observe the building of a nuclear facility, computer graphing, and model making.

Civil Engineering

1. The student will be given a small design project in which he/she will originate the solution to a specific problem and convey the solution to field personnel through drawings and reports.
2. The intern will observe general engineering activities such as layouts, calculations, designs, and drafting.
3. The student will analyze stress points for a building foundation, draw a cross sectional view of an access road, or work on drawings labeling all joints, members, and indices.

Chemical Engineering

1. The student intern will observe research and development in new polymer technology.
2. The student will run plugging rates on the miniriz, varying the fluxes and melt viscosities, to evaluate and fit the best equation to the miniriz data.
3. The student will determine the various additive effects in the low mole ratio process by examining the pilot plant autoclaves.
4. The student will be exposed to some pilot plant experimental work and to a chemical lab analysis.
5. The student will preform a heat balance on a crystallizer.
6. The student will investigate the physical equilibrium content of the PET chip in wet air.
7. The intern will use the PET chip drying computer program to calculate the effects of changing certain variables.

All Engineering Areas

1. The student intern will have the opportunity to observe engineers at work.
2. The student can also observe the work of other related professionals such as the biologist, meteorologist, etc.
3. The student will participate in a field outing such as a visit to the Catawba Nuclear Station.
4. The student can observe technicians doing experiments.
5. The student intern will attend meetings, discuss the work of an engineer with engineers, interview various personnel such as managers, and learn about educational requirements and job opportunities in the engineering field.
6. The student intern will have the opportunity to improve his/her thinking processes.

Vocabulary

Scram - Quick shutdown of a nuclear reactor.

AND gate - Electrical symbols for a circuit put into logic, two consecutive contacts become an AND gate in logic; both inputs A and B must be 1 for an output of 1.

OR gate - Electrical symbols for a circuit put into logic; two parallel contacts become an OR gate in logic; either input A or B must have power for the output to have power.

CSMP - Continuous System Modeling Program is an application oriented simulation program; used in simulating the motor operated valve circuit.

DEDBSAVE - Saves program into Design Engineering Data Base.

CRT - (cathode ray tubes) Terminals on which computer graphics are drawn.

Case-on foundation - Gives equal foundation.

Preload - Level earth for stable foundation.

Catch basins - Drainage system.

Catch ponds - Catch sludge to keep environment clean.

Tactonic structure - Fold in the rock.

QA - (quality assurance).

I & C - (instrumentation and control).

HVAC - (heating, ventilating, and air conditioning).

Cogeneration - Use of plant's steam by other industries.

Resistance - The opposition which free electrons encounter in moving through a material.

Interface - Inter-connect.

SLTE - (sliding link terminal blocks)-Wire connection and disconnection.

Connection diagram - Shows electrician how to wire a circuit.

Motor starter - Large relay used to carry a lot of current in order to start a motor.

ATC - (Area Termination Cabinet) - Interfacing points.

A.S.L. - Language used widely by I.B.M. engineers.

A.S.L. Commands:

FU - list file and give choice of usage.

FO OFF - makes printer not print in a letter sentence form.

LL - spaces of line for printer.

SCF - scroll forward.

Interfacing - The combined efforts of two engineering departments so they can get a job done.

Flang - Top and bottom beam.

Pallet - Plate or table on which controls, accessories, and pieces are placed to be processed by the robot.

Pendant - Control box for the robot that allows handheld as opposed to keyboard operation of the robot's manipulator arm.



Fashion Merchandising

FASHION MERCHANDISING

Overview

Charlotte is home for the country's third largest regional apparel market. Fashion merchandising internships introduce students to either retail department stores where they are assigned to a buyer to learn paperwork and stockwork responsibilities or to the administrative support personnel for retail store operations. Here the students observe overall operations of a buying service, and students help prepare for seasonal buying shows. Selling and merchandising is also offered in a special intensive internship at the Carolina Trade Mart several times a year. Carolina-Virginia Fashion Exhibitors, Inc. works with students both before and during their six-day Charlotte Market Weeks. Students work from the business office to help the more than 25,000 buyers and sales representatives who come to view 2,000 lines of women's and children's apparel in permanent showrooms covering 250,000 square feet.

Students interested in fashion, selling, or merchandising need to be dependable, have good communications skills, and be aware of the competitive, fast-paced nature of retailing. A buyer's job calls for good judgment, resourcefulness, and self confidence to make decisions and take risks.

Content - Scope

Merchandising internships give the students a general overview of the retail clothing industry. Students who work in various departments may coordinate clothes, file, mark prices, check invoices, and help display merchandise.

Internships are 45 hours in length. The special internship at the Carolina Trade Mart prefers students finish their 45 hours in less than two weeks with most hours being earned during the six-day market week.

Competency Goals

1. The intern will take purchase orders, call on stores, and prepare mailers.
2. The intern will be able to ticket samples and recognize national merchandise brands as well as private merchandise brands.
3. The intern will observe selection and distribution of merchandise inventory, vendor relations, advertising, and promotion of a line.
4. The intern will have the opportunity to mark merchandise and to learn the proper balance of styles, colors, and sizes. They also observe what is involved in seasonal buying.
5. The intern will make badges for the buyers, deliver messages, help the vendors, work in a showroom, and attend fashion shows at the Carolina Trade Mart.

Vocabulary

Line - A collection of styles offered by a manufacturer or designer.

Resource - Merchant from whom a store buys or accepts merchandise; also known as a "vendor".

Market week - The week in which buyers attend fashion showings by wholesalers to view the lines for a particular season.

Ready-to-wear - Apparel which is mass produced to standard size measurements.

Designer - Person who creates original garments in the fashion industry.

National brand - Merchandise which is nationally advertised and distributed by a manufacturer.

Sleeper - A fashion overlooked by buyers or fashion editors which becomes popular without promotion and becomes a potential "hot item" with aggressive promotion.

Knock-off - Copy of an original design.

Classic - A style that maintains its popularity over a long period of time.

Buyer - Merchandising executive with the responsibility of planning, buying and selling merchandise.

GOVERNMENT

Overview

Academic internships in government provide students with varied experiences in local, state, and federal government. In local government a student may choose to work with the Charlotte-Mecklenburg Planning Commission where he is exposed to a government organization involved in guiding the growth and development of the city. Other interns may wish to work with a city council member, a county commissioner, the Mayor's office, city or county police department, or analyze data with the energy program coordinator for the city of Charlotte. Linking communications between county government and the public is the Mecklenburg County Public Service and Information Department. Here a student may coordinate school tours provided by county government or work on publications learning photography and graphics behind the scenes.

Studying state government can mean a trip to Raleigh for interns to see government in action. Students may apply to be a legislative page for the North Carolina Senate, House of Representatives, or Governor's office for one week. Energetic, responsible, and mature young people observe the various facets of government and see how the different departments work together to run the state. Another opportunity exists for seniors interested in a career in law, government, or politics at UNCC with the North Carolina Student Legislature. At the conclusion of the 90 hour internship, students attend the five-day NCSL Annual Session in Raleigh with the college delegation to present the bills they have written and debated with legislative leaders.

On the national level students may choose internships to study the federal government with either Close-up Washington, The Washington Workshops, or A Presidential Classroom for Young Americans. Each of these citizenship education programs offer students a firsthand look at the nation's capital for a week with an unparalleled opportunity to meet with key Washington officials. Students develop a better understanding of government policy and today's most crucial issues when they explore the internships in this area.

Content - Scope

Internships in government will help young people become more informed, enlightened citizens in the future. Students may be exposed to local, state, or national government through a variety of internship opportunities. From daily contact with city or county government, law enforcement agencies, Charlotte-Mecklenburg Planning Commission to the state government complex in Raleigh or UNCC's North Carolina Student Legislature, students identify the issues and judge the scope and limits of government as it resolves problems. National government may be studied during a very intense week in Washington. Students explore how government really works as they gain an inside view of the legislative, executive, and judicial branches of government.

Good writing and research skills are important as well as an interest in politics, law, or government. Interns compiling, analyzing and researching energy data should be interested in math, science, engineering, or business. Interviews are required in all internships except for a page in state government. Each page must be recommended by a Senator, Representative, House Speaker, Lieutenant Governor, or Governor. Special approval and arrangements are necessary.

Competency Goals

1. The intern will perform legal research and write bills in order to understand the legislative process.
2. The intern will participate in public speaking and attend debate workshops.
3. The intern will learn parliamentary procedure and serve on operational committees of the college delegation.

4. The intern will monitor city council meetings and help with background preparation of the agenda by research or reviewing written materials.
5. The intern will study various projects in the area of zoning, transportation, design and neighborhoods.
6. The intern will observe county commission and planning commission meetings and have an opportunity to talk with persons in various aspects of planning, growth, and development.
7. The intern in energy management will record building energy usage from invoices, make graphs of energy usage versus degree days, and, in general, analyze energy conservation measures.

Vocabulary

Simple resolution - A document expressing the will or opinion of one government house adopted by a vote of that body on one reading.

Bicameral - A legislature containing two houses.

Bill - A proposed law submitted for consideration by a legislator.

Constituent - A resident of an elected official's district.

Felony - A major crime.

Incumbent - The person holding an office at a given time.

Judicial Review - The authority of the courts to declare a legislative act or an executive decision unconstitutional.

Accountability - The obligation of elected officials to serve the interests of, and to be answerable to, their constituents.

Subpoena - An order to a court, grand jury, or legislative committee requiring the attendance of a person as a witness under penalty for failure to appear.

Quorum - The minimum number of members of an organization who must be present to transact business.

Moratorium - A delay of action, often with a time limitation.

Misdemeanor - A minor or lesser criminal offense.

Lobby - To try to influence the executive and legislative branches for or against an issue.

Ad Hoc - A committee set up to deal with a specific problem which disbands when the study is over.

INTERIOR DESIGN

Overview

Whether a designer working in conjunction with an architect or a decorator working in a department store or a furniture store, persons specializing in interior decorating usually prepare color sketches and detailed scaled plans of finished interiors. Their final efforts result in the creation of beautiful and suitable arrangements of furnishings and decorations inside private homes, offices, club houses, restaurants, and theaters. Interested high school students may have internships or experiences in retail furniture stores, architectural firms, or with independent interior designers.

Artistic talent, good organizational and management skills, and the ability to work well with people are traits necessary for this profession.

Content - Scope

Forty-five to ninety hours of exposure in interior designing in a retail furniture store or an architectural firm give the intern the opportunity to observe and assist with the art of decorating, client-designer consultations, as well as office procedures. The work that the intern does or is exposed to may include planning and supervising the design and arrangement of building interiors, advising customers about styles and color trends, and setting up displays or models of decoration and design plans. The intern may also assist with any of the paperwork such as placing orders, figuring estimates, and maintaining records.

Competency Goals

1. The intern will learn some overall operations of the interior decorating business.
2. The intern will learn procedures concerning room layouts and design, fabric color coordination, and selection of furniture and accessories.
3. The intern will monitor client-designer consultations.
4. The intern will assist with office procedures: filing, maintaining, pricing.
5. The intern will define basic words and terminology relevant to decorating and will demonstrate his/her understanding of the terms when he/she discusses his/her internship with his/her teacher sponsor, community sponsor, and intern coordinator.
6. The intern will narrow career choices.

Vocabulary

Invoice - A list of goods sent to a purchaser; usually shows amounts, prices and shipping charges.

Layout - An arrangement plan for furniture.

Catalogs - Picture book of fabrics, wallpaper, or furniture with samples.

Grade - Quality of carpet, fabric or furniture.

Period - Refers to styles of furniture such as contemporary, modern, or French.

Inventory - Detailed list of articles (furniture, lamps, etc.); usually includes kind, style, and price.



Investment Banking

INVESTMENT BANKING

Overview

The purpose of the investment banking internship is to give high school students an exposure to all phases of the operations end of the brokerage business including portfolio analysis, market studies, price and volume charting, statistical analysis, and market pricing. Intern placement is made in some of the leading national and regional investment banking houses.

Students applying for internships in this area should be juniors or seniors. An understanding of finance, money, or banking is helpful with an interest in a broker career.

Content - Scope

This investment banking internship gives the student an overall view of a stock broker's experiences; the operations end of a brokerage firm such as the wire room, new accounts, cashiering, bookkeeping, and sales areas; knowledge of investment banking principles; educational training necessary; and career opportunities available in the field.

The internship length varies from 45 to 180 hours depending on the individual firm. Student interns will participate in observation activities such as the actual buying and selling of stocks and bonds, brokers talking with customers about financial matters, and stock certificates being received, checked, and typed. Interns will perform hands-on tasks such as working with the computers to send stock and bond purchases to New York, making a record of closing stock prices for a radio show, or calling a bank to confirm the validity of a customer's assets when the customer is applying for a loan. Some companies may have the student intern undertake a project such as selecting a number of stocks and graphing their progress or attend a meeting about tax shelters.

Competency Goals

1. The intern will learn about the operation of an investment banking company by spending time observing and performing hands-on tasks in the various departments like the wire room, new accounts, cashiering, bookkeeping, and sales areas.
2. The intern will attend stock brokers' meetings and tax shelter sessions.
3. The intern will talk to various individuals like financial planners and account executives.
4. The intern will operate the computer in the investment banking environment locating the account names and the account executive's number and will learn how to send stock purchases to New York.
5. The intern will undertake an individual project of selecting certain stocks and making a graph of their progress.
6. The intern will post stock transactions into the stock broker's books.

Vocabulary

AMEX - (American Stock Exchange).

Assets - Everything a company owns and everything due to it.

Balance sheet - Statement of company's assets and capital.

Capital stock - All shares that represent the ownership of a business.

Equity - Ownership interest of common and preferred stock holders in a company; also excess value of securities over debit balance.

Options - An opportunity to buy or sell at a certain price.

Mutual funds - Combined funds of many shareholders invested together.

Blue chip - Used to describe a company that is known nationally and has history of paying dividends.

Proprietor - Single owner of a business.

Growth stocks - Stocks in a company that is growing rapidly.

Defensive stocks - Stocks that have been unaffected by business cycle.

Par value - Dollar assigned to common stock at time stock is issued.

Market value - The amount the stock is worth on the market; the amount a buyer will pay for the stock.

Registrar - Sees that a corporation does not have more stock outstanding than is accounted for.

Transfer agent - Supervises and certifies the transfer of stocks; records the name of each registered shareholder.

Trade - Executed order.

Commodities - Cattle, cotton, etc.; these orders receive first priority because they are continually fluctuating.

AE - (account executive)-Term used for brokers.

QRQ - Method of finding out the financial picture of a firm.

Book value - Changes from year to year; is determined by deducting all liabilities from the company's tangible assets and dividing this amount by the number of outstanding shares of common stock.

Call - An option giving the buyer the right to purchase a particular security at a fixed price.

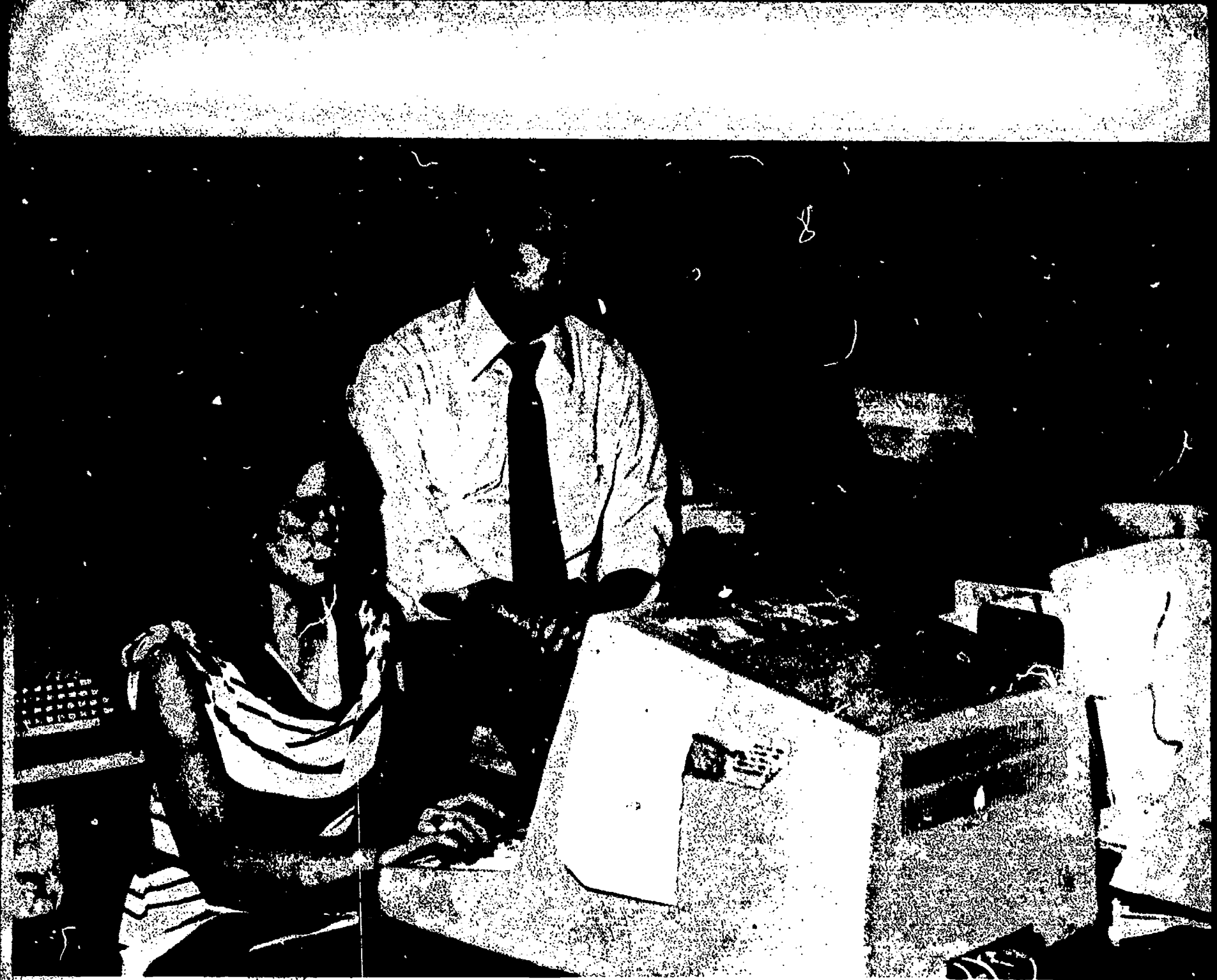
Put - An option giving the buyer the right to sell the security at a fixed price.

Cage - Where all checks are taken; where all the money and paperwork are handled.

Bear market - Long period of time, often a year or more, where general trend of security prices is down.

Blow off - Final phase of up trend ending mark up phase when prices rise very rapidly usually on high volume leading to sharp reaction.

Liquidity - Ability of the market to absorb significant increase in volume with minor price fluctuation.



Journalism

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JOURNALISM

Overview

For the students interested in the field of journalism, several internships involving different career areas are available. The group internship for fifteen students meets for a two hour seminar once a week for a semester. These sessions are conducted by the editors, reporters, and managers of local newspapers, magazines, a publishing house, and a corporate communications department. The purpose of these seminars is to provide an exposure to various careers possible in the journalism field ranging from the advertising director of a large newspaper to the publisher of an ethnic newspaper.

In addition to the group internship, one-on-one internships are available in various departments of the local newspaper, the weekly publications, the local magazines, and the corporate communications office. Although not required, it is helpful if students have an interest in writing and have had an exposure to journalism by being involved with their school newspaper or annual staff.

Content - Scope

The content of the journalism internship will vary according to the community sponsor utilized in a one on one internship, the student's area of interest, or the broad coverage of the group internship. With the daily newspaper, the student will be given the opportunity to write original stories, conduct interviews, rewrite releases, operate the word processor, and learn how the newspaper operates. With a local magazine a student will participate in the business operation or assist in a subscription drive. In photojournalism students are given the opportunity to go on photography assignments, learn developing techniques, and have their work critiqued by newspaper staff photographers. The group internship provides students with an introduction to newspaper operation including advertising, circulation, layout, and design. Students will interact with editors, reporters, feature writers, and editorial cartoonists and will participate in writing assignments which will be critiqued by newspaper staff editors and reporters.

The group internship requires a participation of 40 hours. Other journalism internships range from 45 to 180 hours.

Competency Goals

Competency goals in the journalism internship vary depending on the community sponsor and the student's interest. The learning experiences of the group internship will be different from the one-on-one journalism internship.

1. The student will learn how to operate the newsroom computer for creating a story.
2. The student will be exposed to and have hands-on experience with various types of newspaper writing including features, editorial, and column articles.
3. The student will observe the daily routine of reporters, editors, photographers, and business persons involved in newspaper operation.
4. The students will have an opportunity to write stories for publication and have their ideas discussed and evaluated by newspaper staff persons.
5. Attending an editorial planning session and a daily budget meeting of department heads will enable the student to observe behind the scenes planning in the newspaper business.
6. The student will learn about the operation of the layout room, the newspaper library, the photo laboratory, and the editing process.

7. The student will learn how to set up and conduct an interview.
8. In an internship with a local magazine, the student will learn about producing a monthly publication, editing the articles, selling the advertising, and conducting a subscription campaign.
9. The student will have the opportunity to ask questions concerning the field of journalism and learn about job opportunities and educational requirements.

Vocabulary

- Dateline** - The location from which a story originates.
- Byline** - The name of the writer of a story.
- Lead** - The first paragraph or several sentences of a story.
- PEG** - The reason for which a story is written.
- Kicker** - The last paragraph or several sentences of a story.
- Follow-up** - Succeeding accounts of a news event.
- Advance** - To preview an upcoming event.
- Promo** - A group of words used to promote a story.
- Sidebar** - A shorter story written in relationship to a longer story.
- Sig line** - A reporter's name in bold type at the end of a story. Sig lines are sometimes used on shorter stories or sidebars to replace bylines.
- Review** - A story written by a critic after viewing a public performance.
- Editorial** - The voice of a newspaper; an opinionated piece that presents a stand and is usually connected to significant news events.
- Refer** - A synopsis that keys readers to a specific story.
- Cutline** - A group of words that explain a photograph.
- Mug** - A head-and-shoulders picture of a person.
- Preview** - A story written by a critic before a performance has been presented to the public, although it has been viewed by the critic.
- Infographic** - A collection of facts usually presented in tabular or chart form.
- Brief** - A short story, usually no longer than two to four paragraphs.
- Lead story** - The story that will be played the most prominently on a page; the positions of such stories may vary from day to day.
- Filler** - A short story used to fill small amount of space.



Laboratory Technology

LABORATORY TECHNOLOGY

Overview

Students interested in science related careers may be interested in exploring the work of clinical workers in a medical diagnostic laboratory. Under the supervision of a pathologist, such students may be exposed to the techniques of medical technologists, medical laboratory technicians, and/or medical laboratory assistants in a local hospital. Due to the nature of work done by clinical laboratory workers, interns spend the majority of their time observing and asking questions. What they see and how involved they become not only depends on the kind and volume of specimen to be tested at the time the intern is present, but also on the initiative and interest shown by the intern.

Content - Scope

During a 45 hour internship experience, students observe, have their questions answered, and engage in limited hands-on task. They are rotated through the various laboratories in the hospital. These include hematology - urinalysis, microbiology - serology, histology - cytology, blood bank chemistry, and surgical pathology. Students also have an opportunity to do research on topics of interest.

Competency Goals

1. The intern will observe and assist—when feasible—the clinical laboratory workers as they perform laboratory tests and carry out other laboratory procedures.
2. The intern will be able to identify the three levels of personnel in a medical laboratory setting and the kinds of duties they perform.
3. The intern may learn to “type” blood and do a germ stain on bacteria.
4. The intern will be able to identify some of the kinds of tests that are performed in the various laboratories.
5. The intern will keep a list of words and terms with definitions which relate to laboratory tests, laboratory procedures, and laboratory personnel; moreover, the intern will demonstrate his/her understanding of these terms when he/she discusses his/her internship with the teacher sponsor, community sponsor, and intern coordinator.

Vocabulary

Clinical laboratory worker - Medical technologists, medical laboratory technicians, and medical laboratory assistants who perform laboratory tests on specimens taken from patients by other health professionals. These workers' level of performance depends on their educational status.

Medical technologist - Has at least four years of post-secondary training and performs complicated chemical - biological, hematological, microscopic, and bacteriological tests; may also do research, develop laboratory techniques, and teach or perform administrative duties.

Medical laboratory technician - Has two years of post-secondary training and performs tests and does laboratory procedures that require a high level of skill but not in-depth knowledge of highly trained technologists.

Medical laboratory assistant - Usually has one year of formal training and assists medical technologists and technicians in routine tests and related work.

Biochemistry - The chemical analysis of body fluids.

Blood bank technology - The laboratory work of a blood bank.

Blood bank - A place for storage of blood to be used in transfusions; the blood kept in storage.

Cytotechnology - The study of human body cells.

Hematology - The study of blood cells.

Histology - The study of human and animal tissue.

Microbiology - The study of bacteria and other microorganisms.



Law

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LAW

Overview

Attorneys, whether advising clients about their legal rights and obligations or representing opposing parties in criminal and civil trials, must keep abreast of continuously changing social needs as well as changes in the legal system that regulate our social, economic, and political relationships. Therefore, lawyers have begun more and more to specialize. Most high school students thinking about studying law are not aware of the various kinds of law practices, nor are they aware of the various law related areas or careers.

The AIP provides opportunities for students to have seminars with attorneys and to monitor and have hands-on experiences relevant to law and law related occupations. These experiences may be realized through "law group" internships or "one-on-one law" internships.

High school students interested in pursuing law should do well in general academic courses. In addition, it would probably be very helpful for them to participate on debate teams, take speech courses, learn to organize and write information to present a point of view, and learn good methods of research and note taking.

Content - Scope

During a 45 hour group law internship experience, the interns will most likely explore the following kinds of law practices and law related career areas: corporate law, juvenile law, criminal law, commercial law, domestic law, civil rights and employment, federal law, law enforcement, bankruptcy, personal injury and property damage. Various attorneys from the Young Lawyers Association of Charlotte conduct seminars, engage students in role playing, have them talk with a judge, have them monitor court in session, and teach them how to look up deeds and other records. These students tour the county jail and courthouse and have their questions answered about law. The two-hour-per-week seminars continue for a total of 30 hours. Court observations by interns total 13 hours, and an oral presentation and written paper about the internship exposure are given the time value of approximately 2 hours.

On the other hand, one-on-one law interns are exposed to most of the above activities, but they interact with fewer persons as they intern. They may have 45 to 180 hours of internship exposure. In either case—group law or one-on-one law—the interns learn a lot about the work, problems, concerns, and educational requirements of law and law related careers.

Competency Goals

1. The intern will be exposed to some concerns, methodologies, and unique cases of various attorneys. In addition, they will learn about educational requirements to become lawyers.
2. The intern will gain some knowledge about the relationship of lawyers to other law related occupations.
3. The intern will become knowledgeable about the court process.
4. The intern will learn to look up deeds and other records in the office of the Register of Deeds.
5. The intern will write a paper or keep a journal in which he/she demonstrates his knowledge of judicial terminology.

Vocabulary

Criminal Law

Defendant - The accused person in a criminal case.

Warrant - A written order, made on behalf of the State, which commands a law enforcement officer to arrest an individual, and outlines the offense which is alleged to have been committed.

Probable Cause - The standard the State must meet before it can arrest or try an individual. The State must show that a reasonably prudent individual would find that it is more probable than not that a crime has been committed and that the person arrested is guilty of that crime.

Search and Seizure - This term refers to the rights of law enforcement officials to search an individual or his property and seize any evidence they might discover.

Felony - A serious crime which can be punished by imprisonment in the State's prison system, usually for more than two years.

Misdemeanor - A less serious crime than a felony, which can be punished by a fine or by imprisonment other than in the State's prison system, usually for less than two years.

Capital Crime - A very serious offense in which the death penalty can be—though it need not be—imposed. Murder is the only capital offense in North Carolina.

District Attorney - The State's chief official in each county charged with prosecuting violations of the law.

Public Defender - The State's chief official in some counties charged with the duty to provide legal services to indigent individuals who are charged with criminal offenses in which they face imprisonment.

Commercial Litigation and Bankruptcy

Bankruptcy - Legal proceedings in which a trustee takes control of the property of one who cannot pay his debts and distributes it among the creditors of the bankrupt individual with the result being that the bankrupt individual is no longer liable on his debts.

Security Agreement - An agreement in which a creditor is given an interest in personal property of another in exchange for a loan.

The Uniform Commercial Code - A body of laws adopted by all States, except Louisiana, which govern the sale of goods, secured transactions, and other commercial relationships.

Debtor - One who owes a debt.

Creditor - A person to whom a debt is owed.

Collateral - The property in which a creditor is given an interest through a Security Agreement.

Execution Upon a Judgment - The process in which the Sheriff collects a money Judgment, which can include selling the property of the debtor.

Debtor's Exemptions - Statutory rights of the debtor which prevents the Sheriff from selling certain property to satisfy a Judgment.

Domestic Law

Alimony - Payments made by the defendant spouse to a dependent spouse for maintenance while they are separated or after a divorce.

Child Custody - The determination by the Court of which parent should have control of the children of a marriage after a divorce or separation proceeding; until the child is 18 years of age.

Child Support - Payments made by the spouse who does not have custody of the children after a separation or divorce to the one who does have custody, usually until the child is 18 years of age.

"Best Interests of the Child" - This standard is used by the Courts to determine which parent should be awarded custody of the children after a divorce or separation proceeding and includes an examination of all relevant factors.

Divorce - A legal proceeding which severs the bonds of matrimony.

Equitable Distribution - A legal proceeding which takes place at the time of divorce or shortly thereafter, in which the Court distributes the property acquired during the marriage equitably between the divorced husband and wife.

Personal Injury and Property Damage

Insurance Adjuster - An employee of an insurance company which the attorney usually deals with in settling personal injury and property damage claims.

Negligence - The omission to do something which a reasonable man would do, or the doing of something which a reasonable and prudent man would not do. (Ex.: fail to yield right of way, speeding, run a stop sign, leave a greasy floor in a restaurant, etc. Some of these may also be criminal offenses and also negligence.)

Respondeat Superior - The legal doctrine that makes an employer responsible for the negligence of his employees if during the course of the employee's employment.

"Before and After Value" - A method to determine damage to property by determining the value before the accident and the value after the accident, with the difference being the amount of damages.

Liability - Legal Responsibility - Liability is the primary issue in all personal injury actions. Unless a party is liable, they do not owe damages.

Damages - The sum of money awarded to a person injured due to the negligence of another in a personal injury or property damage action.

Judgment - The final decision of the Court which resolves the dispute and determines the rights and obligations of the parties. In a personal injury action, this includes the determination of liability and the amount of damages due the injured.

Release - A document in which an injured party agrees not to pursue any legal actions he has against the one who injured him, usually in exchange for a cash settlement.

Workers' Compensation Act - A State statute which provides for fixed awards to employees for injuries due to accidents which arise out of and in the course of their employment, which eliminates an examination of the negligence issue. The Act is administered by the North Carolina Industrial Commission.

Business Associations

Corporation - A legal entity created by or under the authority of the laws of a state, usually to transact business, whose main advantage is limited liability for the individuals involved.

Partnership - An association of two or more persons to carry on, as co-owners, a business for profit.

Limited Partnership - A partnership which has two classes of partners - general partners and limited partners. General partners have the same rights and responsibilities as any other partner in any other partnership, while limited partners, however, have no personal liability for partnership obligations.

Sole Proprietorship - A business which is unincorporated and owned and operated by a single individual.

Officers - In a corporation, a person charged with an important function of management, such as president, vice-president, secretary or treasurer.

Board of Directors - The governing body of a corporation, which is elected by the stockholders. The Board is empowered to elect and appoint officers of the corporation, declare dividends, and act on other major matters affecting the corporation.

Stockholder - A person who owns shares of stock, i.e., an ownership interest, in a corporation, which usually gives them the right to vote on certain important issues, to receive dividends, etc.

Real Estate

Deed - A legal document which transfers the ownership of real property from one individual to another. It must be recorded at the Mecklenburg County Register of Deeds office.

Real Property or Realty - A term used generally to refer to land or whatever is erected or growing upon or affixed to the land.

Personal Property or Personalty - A term which usually designates all property that is not real estate. It is not permanently affixed to real property and is generally easy to move.

Note - A legal document which contains an express promise to pay a definite sum of money at a definite time.

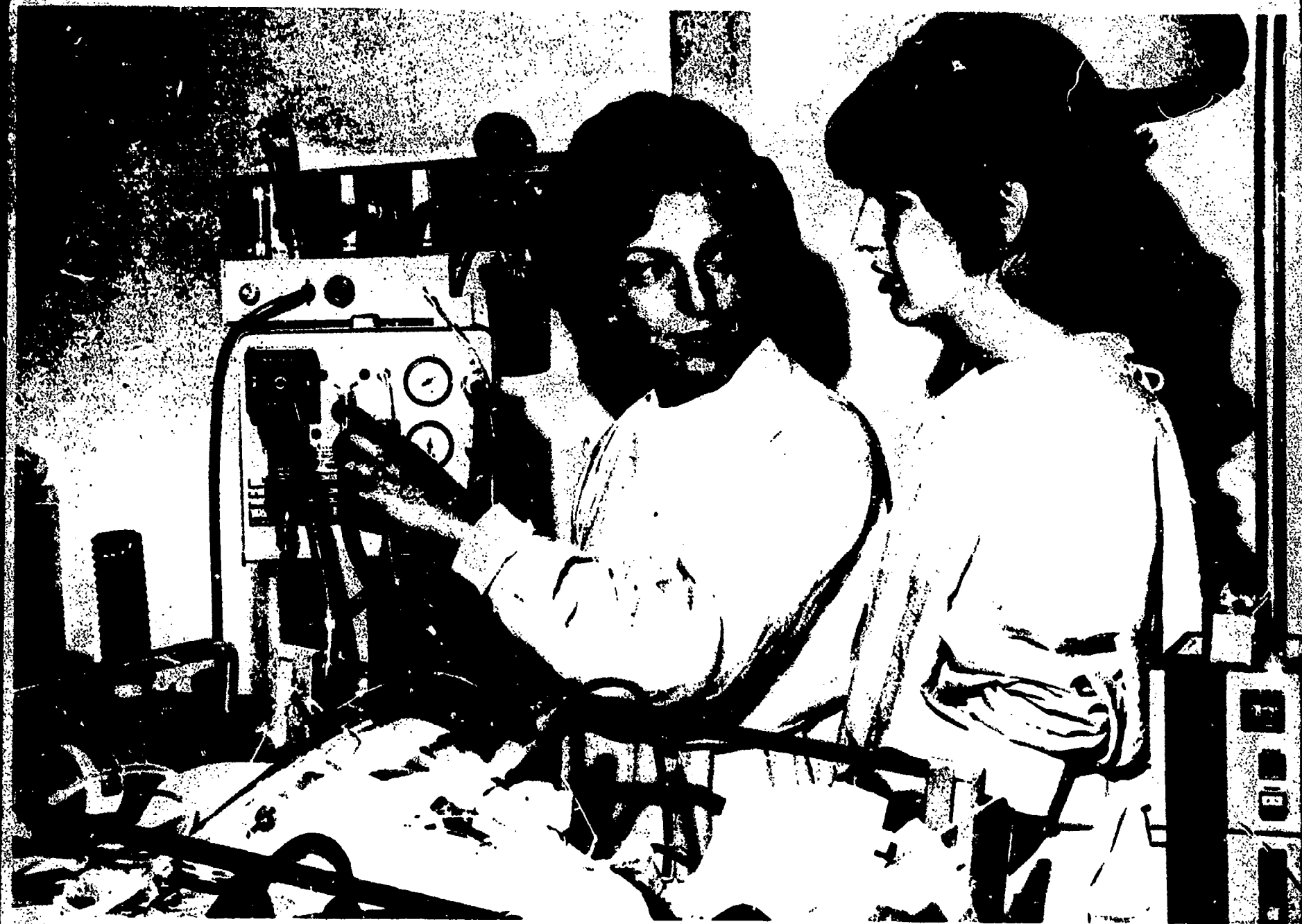
Deed of Trust - A document used to secure the repayment of a sum of money which is evidenced by a note usually, in which the title to the property is vested in a trustee, until the debt is paid off. Although different in form, a deed of trust is frequently called a mortgage.

Grantor - Trustee - Beneficiary - In a typical deed of trust transaction, a landowner receives a loan from a bank, evidenced by a note. As security for that loan, the landowner, called the grantor, gives title to the property to a trustee, and his duty is to protect the interest of the bank, also known as the beneficiary. When the debt is paid off, the trustee will cancel the deed of trust, and the landowner will then have title to the property again.

Foreclosure - If the debt is not paid in full, or the grantor breaks other promises to the bank, the trustee can take actions to protect the beneficiary. This usually means that the trustee will sell the property at a foreclosure sale, in which the beneficiary will receive the amount of the money that is owed to it, and any money left over will then go to the grantor of the deed of trust.

Restrictive covenants - Provisions in deeds or other documents which limit the use of the property. (Ex.: no houses can be built having less than 2300 square feet.)

Easement - A right of use in the property of another. (Ex.: telephone lines, power lines, cable-vision, etc.)



Nursing

NURSING

Overview

High school students participating in the internship program who wish to explore nursing are usually interested in the work of a registered nurse. When students are placed in the local hospitals or nursing homes, they are assigned to a registered nurse who sees to it that the intern observes and assists in a wide variety of health care functions that aid in the rehabilitation of patients. Since registered nurses constantly interact with other medical personnel, exposure may include the work of not only registered nurses but also practical nurses, aides, orderlies, and doctors. Interns observe and assist the nurses with limited medical procedures. However, what they monitor and how involved they become not only depend on the medical problems in question at a given time but also on initiative and interest shown by the intern.

Content - Scope

During a 45 hour nursing internship, the intern is first oriented to the rules and regulations of the hospital's environment. This orientation period may differ in hospitals ranging from 2 to 12 hours. Then the intern chooses a floor or department to do his clinical. Thus, the work is with patients who require similar nursing care. For instance, some interns may be placed with nurses working with patients who have had surgery, others may be placed with pediatric nurses, geriatric nurses, or general medical nurses. This is an opportunity for nursing interns to learn about the patient-nurse-doctor relationship as well as learn how a nurse is involved in the prevention and treatment of health problems.

Competency Goals

1. The intern will observe the nurse functioning in various treatments of patients; administering medication, making rounds, changing I.V.'s, checking heartbeats, taking temperatures, and cleaning and dressing wounds.
2. The intern will assist in ambulation, answer call lights, and pass water and ice as directed by the nurse.
3. The intern will take culture and urine specimens to the laboratory, take orders to the pharmacy laboratory, and run errands.
4. The intern will watch doctors and hear explanations when doctors examine X-Ray negatives.
5. The intern may observe minor surgery on someone's finger, toe, or head. These observations may result in knowledge about general stitching procedures and skin grafts.
6. The intern will learn to comfort patients who are in pain; may read to patients and feed them.
7. The intern will engage in role play to learn some medical procedures such as lifting patients, dressing wounds, and transporting them.
8. The intern will keep a list of words and terms with definitions that relate to medicine and will demonstrate an understanding of them when he/she discusses his/her internship experiences with his/her teacher sponsor, community sponsor, and intern coordinator.

Vocabulary

(Nursing students may learn more or fewer terms and even different medical terms than those that follow.)

Abdominal prep - The procedures for making the patient's abdomen ready for surgery. The preparation includes thorough cleansing of the skin and careful shaving of the body hair in the abdominal area.

Ambulatory - Able to walk around.

Anesthetic - A drug used to produce loss of feeling in a person. An anesthetic can be given orally, rectally, by injection, or by inhalation. A person who has been given an anesthetic is anesthetized.

Antibiotic - A drug used in medical treatment that prevents a disease-causing microorganism from multiplying.

Bacteria - Sometimes called germs; a kind of microorganism. Many bacteria cause disease.

Bedpan - A pan used by patients who are in bed so that they can defecate or urinate.

Catheter - A tube inserted into a body cavity, usually to withdraw fluid.

Coma - A state of deep unconsciousness often caused by disease, injury, or drugs.

Defecate - To have a bowel movement; to excrete waste matter from the bowels.

Disinfection - The process of destroying most disease-causing organisms.

Graphic Chart - A medical record that shows a patient's TPR, intake and output, and blood pressure.

Isolation Gown - A special gown worn over a uniform when in the room of a patient with a communicable disease.

NPO - An abbreviation for a Latin term, "Nil per Os", which means nothing by mouth. A sign reading NPO is usually put at the head or foot of the patient's bed if he is not permitted to eat or drink anything by mouth.

Oral - Anything that is oral has to do with the mouth. Examples are eating and drinking.

Prone - Lying on one's stomach.

Radial Pulse - This is the pulse felt at a person's wrist.

Sitz Bath - A bath in which a person sits in a specially designed chair-tub or regular bath tub with his hips and buttocks in water.

Specimen - A sample of material taken from the patient's body. Examples are urine specimens, feces specimens, and sputum specimens.

TPR - An abbreviation for temperature, pulse, and respiration. Taking a TPR is measuring these three vital signs.

ICU - Intensive Care Unit.

IV - Intravenously.

T.T.D. - Three times day.

PHARMACY

Overview

The purpose of the internship in pharmacy is to give the student exposure in a variety of pharmaceutical environments. The student may intern in several community sponsor sites to experience being a pharmacist in both the hospital setting, a nursing home, and the independent retail operation. The student will learn that the pharmacist helps to heal people and control the use of drugs. The student will have the opportunity to learn how to read and fill prescriptions, make I.V.'s, take inventory, perform techniques of compounding, participate in poison prevention campaigns, attend a meeting of the Mecklenburg Pharmaceutical Society, and visit the School of Pharmacy at U.N.C.

Students who would like to participate in pharmacy internships should be juniors or seniors, have completed Chemistry I, and have a strong interest in science and math.

Content - Scope

The following concepts will be covered in the student intern's pharmacy internship:

Community pharmacy practice

Community pharmacy practice refers to the traditional practice of pharmacy in the 'drug store' setting. It may be described as "retail pharmacy" although the proper term is community pharmacy practice.

Institutional pharmacy practice

Institutional pharmacy practice refers to the delivery of pharmacy services in an organized health care setting such as a hospital, nursing home, etc. Previously, the term "hospital pharmacy" was used although this has very recently been broadened to incorporate other types of organizations. This term may also include pharmacy practice in health maintenance organizations (HMO) and other similar facilities.

Clinical pharmacy

The traditional practice of pharmacy involves the distribution (dispensing) of drugs, drug-related products, and devices to patients. Clinical pharmacy, in contrast, is the patient-oriented practice of pharmacy, involving the participation of the pharmacist in the actual selection of drugs to be used, determination of their dose, and monitoring of effects as well as education of patients. Clinical pharmacy is generally practiced by a pharmacist holding advanced degrees such as the Doctor of Pharmacy degree.

Therapeutics

Therapeutics is the science (and art) of correctly assessing patient disease and selecting an appropriate drug, drug dosage form (see below), and dosing regimen for a patient. Traditionally, therapeutics was approached as an art with no precise guidelines. However, particularly with the advent of clinical pharmacy, therapeutics has become a more scientific activity.

Dispensing

The act of compounding, packaging, labeling and otherwise preparing a drug product for delivery to a patient is the act of dispensing. The process may involve communication with the patient to provide information regarding the proper use and handling of the drug product. The most visible aspect of pharmacy practice very often is the dispensing of medicines to patients.

Unit dose drug distribution

In institutional pharmacy practice, a relatively new drug dispensing system is unit dose drug distribution. In this system, doses of drugs are individually packaged (in unit-of-use packaging) and remain

packaged until the actual time of administration to the patient. This is considered to be a progressive form of institutional pharmacy dispensing.

Drug dosage form

Dosage form refers to the physical characteristics of the drug product being administered to a patient. For instance, oral solid dosage forms include tablets, capsules, and pills, while oral liquids include solutions, elixirs, and syrups. Other drug dosage forms include parenteral dosages for administration into muscle (intramuscular) or directly into blood vessels (intravenously).

Drug dosage regimen

The dosage regimen used with a given drug refers to the dosage form employed, the actual dosage (quantity) administered, the frequency of administration, and the duration of therapy. For instance, if an antibiotic is given in a dose of one 500 mg capsule, every six hours for 10 days, this would be described as the dosage regimen.

Pharmacokinetics

One of the unique areas of knowledge among the pharmaceutical sciences is the science of pharmacokinetics. The term is derived from Greek words meaning drug (pharmakon) and movement (kinesis). It refers to the study of the absorption, distribution within the body, metabolism transformation, and elimination of drugs from the human body. Pharmacokinetics as a science is concerned with studying the rate at which these processes occur.

Parental therapy

Another speciality area of pharmacy practice involves the administration of drugs by parenteral (non-enteral) routes. Enteral therapy refers to the administration of drugs via the gastrointestinal system (oral dosage forms or rectal suppositories). Parenteral refers to administration of drugs by other routes and usually means intramuscular or intravenous administration.

The average internship in pharmacy is 45 hours in length.

Competency Goals

1. The student will receive a tour of the hospital and pharmacy areas.
2. The student will assist the pharmacist by counting pills, classifying drugs, reading prescriptions, and making medicine by mixing powders and cream.
3. The student will learn the procedure of a prescription from doctor's orders to the patient.
4. The student will learn how the computer records the patient's history which is used in prescribing drugs.
5. The student will learn how to make I.V.'s.
6. The student will learn the different reactions to medication.
7. The student will attend a professional meeting of pharmacists and/or visit the School of Pharmacy at U.N.C.
8. The intern will learn about inventory control of pharmaceutical supplies.
9. The intern will have direct patient contact in gathering information on patients and checking patient profiles.

Vocabulary

First line therapy - First stage of treatment.

Indigent - Person with no means to pay.

Formulary - Most effective drug for the cheapest price.

Prescription - Doctor's order to indicate what medication is needed and must be signed by a licensed doctor.

Apothecary - One who prepares and sells medicines and drugs.

Diagnosis - The conclusion reached by the doctor indicated by what the patient has.

Mortar and pestle - Mortar is the bowl; pestle is the stirrer; both are used to mix solutions.

Syrup - A sugar based liquid that carries drugs into the body.

Suspension - A liquid that carries particles of drugs which will not dissolve into the body.

Elixir - A very thin liquid with a high alcohol base which carries drugs with no particles into the body.

DEA - Drug Enforcement Administration is a federal agency that governs pharmacy practice.

DEA Number - Number assigned to each pharmacy and physician to write prescriptions for habit forming drugs.

Reconstitute - Powdered liquid.

Capsule - Form of medication that comes in solid dosage forms in which the drug substance is enclosed in either a hard or soft, soluble container or shell made from gelatin or cellulose.

Troche - Tablet that dissolves in the mouth.

Tablet - Form of medication that appears in a solid pharmaceutical dosage form containing drug substances with or without suitable dilutents and prepared by compression or molding methods; dry form of drug.

Pharmacology - Study of how drugs effect the body.

Pharmacognosy - Study of plants and how they effect the body.

PHOTOGRAPHY

Overview

In this field, students are placed with photographers who specialize in a particular type of photography such as portrait, fashion, or industrial work. All of the placements have been in the area of still photography rather than motion picture photography. Students who have internships in photojournalism explore photography for newspapers and magazines and not for television news shows. Examples of placement sites include Phil Aull and PCA International, portrait photography; GVA Productions, industrial or commercial photography; and Knight Publishing Company, photojournalism.

There are no set entry requirements for persons interested in formal education or training in photography. A person may get on-the-job training as an assistant to a photographer, or he may attend art school, a junior college, or a four year university. Some knowledge of chemistry, mathematics, and physics are essential for understanding the use of various lenses, film, light sources and processes for film development. Persons interested in photojournalism often need to have good writing skills.

Content - Scope

Interns observe and have hands-on tasks with the various kinds of photographers with whom they are placed. Most students are placed with still photographers who may either be in the business of portraiture, commercial, industrial work, or photojournalism. They all get the same basic exposure which includes camera work, darkroom work, office procedures, and dealing with the public.

Internships in photography vary from 45 to 180 hours.

Competency Goals

Portraiture

1. The intern will develop an understanding of camera operations for the purpose of shooting quality portraits.
2. The intern will observe staff photographers covering assignments and will learn to assist the photographers as they work.
3. The intern will learn procedures for developing photographs.
4. The intern will gain some knowledge of how retouching and spraying are best accomplished.
5. The intern will develop methods of having persons relax and act natural while posing for portraits.
6. The intern will gain knowledge of how to best frame pictures for various occasions.
7. The intern will develop techniques for arranging portfolios and picture journals.
8. The intern will observe office organization and procedures and will assist with clerical work when feasible.

Photojournalism

1. The intern will have similar exposure as described above under portraiture in numbers 1-4 and will develop some competency in each area.
2. The intern will learn some methodology for photo layouts in newspapers and/or magazines.

3. The intern will gain knowledge of how to spot newsworthy photography.
4. The intern will learn methods of dealing with the public.
5. The intern will learn how to write captions and stories to accompany pictures he has taken.

Industrial-Commercial Photography

1. The intern will have similar exposure as described above under portraiture in numbers 1-4 and will develop some competency in each area.
2. The intern will develop techniques for arranging catalog displays and advertising methods.
3. The intern will gain knowledge of many photographic techniques that will enable him to create attractive eye-catching promotional pictures.
4. The intern will monitor client-photographer dealings and will learn methods of assisting clients with their particular needs.
5. All photography interns will have an opportunity to narrow career choices.
6. The intern will demonstrate knowledge of terminology relevant to photography.

Vocabulary

(Basic terminology for all still photography)

Spotting - Process of retouching blemishes on pictures.

Spraying - Method of sealing pictures for protection.

Enlarger - Device used to print a negative.

Developer - Liquid used to bring out the image on paper and film.

Hypo - Liquid used to preserve a print negative.

Poly contrast - Differential contrasts.

Ambient light - Natural light.

Layout - Design of the printed page.

Light meter - Method for measuring ambient light.

Flash meter - Method for measuring artificial light.

Rosco - Material used to diffuse light.

PHYSICAL THERAPY

Overview

Academic internships in physical therapy offer students varied experiences in the treatment and rehabilitation of persons with physical or mental disabilities or disorders. Interns may be placed in an acute orthopaedic private hospital setting, a rehabilitation hospital, a nursing home for chronically ill or elderly patients, or the physical therapy department of a large general hospital. Students may work with therapists who treat patients with a wide variety of problems or may work with a community sponsor who specializes in pediatrics, geriatrics, orthopedics, sports medicine, neurology, or cardio-pulmonary diseases. Due to limitations by law the intern's level of responsibility with patients is often restricted to observation.

Interns become aware of the keen competition for entry into physical therapy programs. A strong academic background with excellent grades, especially in science are a must for the serious student. Useful high school courses are biology, chemistry, health, physics, social science, and mathematics. Qualifications for this internship exposure specify that mature high school juniors or seniors should have a sincere interest in helping people adjust to their handicaps.

Content - Scope

Using all the therapeutic arts, physical therapists give exercises designed to correct muscle ailments and deficiencies to patients. They also administer massages and perform other body manipulations to help people overcome their disabilities.

Internships involve assisting with portions of selected patient treatment and observing physical therapists and their assistants in their varied roles. Students may put together crutches, addressograph charge slips, or assist with whirlpool baths. Orientation and training in aspects of emotional problems of elderly people may be observed as well as consultations with the social worker on difficult cases.

Most community sponsors prefer only one or two interns at a time. Most physical therapy internships are 45 hours in length.

Competency Goals

1. The intern will help transport patients in wheelchairs to therapy.
2. The intern will make hot packs, ice packs, and assist therapists with stroke patients and amputees.
3. The intern will observe exercise and ambulation of patients, prosthetic training, splint making, and application of modalities of heat, cold, water, and electricity.
4. The intern may be asked to assist putting away supplies, making bulletin boards or clerical work associated with patient care.
5. The intern will interview patients and families and write case histories.

Vocabulary

Abasia - Inability to walk due to defective coordination.

Ambulation - Walking, able to walk.

Arthritis - Inflammation of joint—can be rheumatoid or osteoarthritis.

Atrophy - A wasting away or diminution in the size of cells, tissue, organ, or part.

Cyanosis - Blueness of the body due to lack of oxygen in the blood.

M.S. - (multiple sclerosis) - A chronic progressive disease of no specific pattern that causes hardening of areas in the brain and spinal cord.

M.D. - (muscular dystrophy) - Progressive atrophy of the muscles with no discoverable lesion of the spinal cord.

Prognosis - Forecast as to the course and outcome of a disease or injury.

Rehabilitation - Restoration of an ill or injured person to self-sufficiency.

Traction - Act of pulling or stretching muscles or joints.



Physician

PHYSICIAN

Overview

Some high school students interested in the medical sciences wish to work in the area of prevention, diagnosis, and treatment of human diseases, as well as disorders or injuries. Most often these students are not sure as to what kind of physician they wish to become or if they wish to become a physician at all. Will they be general practitioners? Will they specialize? Or, are there other medical careers of interest to them? To help students narrow the choices, the AIP offers medical group internships wherein students meet with various doctors and other medical personnel to hear a discussion concerning a particular medical area, to see films, discuss articles from medical journals, and have their questions answered. In addition to this internship, some students are placed on a one-on-one medical internship with pediatricians or sport medicine doctors. Here their exposure is limited to the study of one kind of medical area.

Any student interested in pursuing a career in medical science should seek to be competent in courses such as advanced mathematics, chemistry, and the biological sciences.

Content - Scope

Along with scheduled seminars to hear discussions by medical personnel such as nurse practitioners, the interns participating in the medical group meet with various physicians to gain insight about given medical areas. Among the kinds of doctors who participate are obstetricians, pediatric neurologists, plastic surgeons, cardiologists, general practitioners, ophthalmologists, and radiologists. These doctors show the students films, explain charts and graphs, instruct them in methods of identifying, preventing and treating diseases, and answer questions about medicine. The two hour per week group meetings help inspire students to read from medical journals (a part of the 45 hour internship). This usually leads to decisions about what they will study after high school.

The one-on-one medical interns get a chance to observe the problems of patients more often, but their internship is a more narrow view of medicine than is experienced by the group interns. Interning from 45 to 180 hours, one-on-one interns are exposed to the work of one doctor and his staff.

Competency Goals

Group Internship

1. The intern will become more knowledgeable about the existence of various kinds of physicians and other medical careers.
2. The intern will gain knowledge about the future of medicine.
3. The intern will read and discuss articles from medical journals.
4. The intern will increase his medical vocabulary.
5. The intern will have a greater appreciation for the treatment and prevention of diseases.

One-on-One (Pediatric Medicine)

1. The intern will learn simple office and nursing procedures and assist with these functions when feasible.
2. The intern will develop an understanding of how to weigh patients, take temperatures, collect and examine specimens and will assist with these duties when feasible.

3. The intern will observe the doctor when he is doing "well check-ups" and various other examinations and will learn some things concerning the treatment and prevention of diseases.
4. The intern will keep a list of words and terms that relate to medicine and will demonstrate an understanding of them when he discusses his internship with his teacher sponsor, community sponsor, and intern coordinator.

One-on-One (Sports Medicine)

1. The intern will learn simple physical therapy procedures and observe how the business office functions in a medical practice.
2. The intern will observe the doctor as he examines various injuries and disorders of the knee, neck, shoulder, back, and feet, and will gain an appreciation for the treatment applied.
3. The intern will observe demonstrations of ultra sound treatment, therapeutic massages, exercises, and other therapy treatments.
4. The intern will keep a list of words and terms with definitions that relate to sports medicine and will demonstrate an understanding of them when he discusses his internship with his teacher sponsor, community sponsor, and intern coordinator.

Vocabulary

(Pediatric Medicine)

OFC - (occipital frontal circumference) - Measurement of head circumference (HC); measured from back to front in centimeters.

Gross Motor Skills - Skills such as standing, sitting, walking, kicking and throwing.

Otoscope - Piece of equipment used to check the ears for complications such as infections

Group "A" Strep - The strep which can lead to rheumatic fever if not detected or if left untreated.

Fine Motor Skills - Skills such as being able to bang two blocks together, build a tower of blocks, dumping beans from bottle, scribbling and imitating.

ASA - Symbol for children's aspirin.

Aphasia - Inability to speak due to brain disorder.

Apraxia - Inability of muscles to function properly.

CBC - (common blood count).

Outpatient - Refers to patient who has lab work or other medical work done to him in the hospital without occupying a bed in the hospital.

URI - (upper respiratory infection) - Example, common cold.

LRI - (lower respiratory infection) - Example, bronchitis.

UTI - (urinary tract infection).

T.B. test - Tine test; tuberculin test.

Urinalysis - Test the PH level of sugar.

Sports Medicine

Ultra Sound - Method of therapy on the injured spot.

Gout - Inflammation in the joint.

Scotchguard cast - Fiberglass type cast; lightweight.

Rotator cuff - Muscles in the shoulders.

Full hip - Ball and socket joint totally replaced in hip.

Scoleosis - Curvature of the spine from left to right.

EMS - (electrical muscular stimulus).

Patella - K cap.

RADIO - TELEVISION

Overview

Students interning in radio/television discover the total concept of a "glamour" business is in reality one of routines, formats, work pressures of deadlines, irregular hours, and beginning low salaries. Interns also discover the many satisfactions of this career—the personal contacts, creative work, and satisfaction of becoming well-known in the area their station serves. Through individual internships and in the group radio/television sessions, interns realize the keen competition for beginning jobs in broadcasting and the importance of a broad liberal arts education in college. High school courses in public speaking, drama, English courses and knowledge of current events from social studies classes will improve chances of success.

The group internship meets once a week for two hours at seminars during the semester at various stations. WBTB is the "anchor" station for this internship with WBT AM radio, WBCY FM radio, Jefferson Productions, P.M. Magazine, and a final session with a panel of experts to answer students' questions and listen to oral presentations. Others participating in the Charlotte area are WSOC, WROQ, WTVI public television, Cablevision, WPCQ, WCCB, Garinger High School Radio/Television Department, and a local corporation that utilizes television.

Content - Scope

The radio/television interns are exposed to a variety of things with the community sponsors. They observe how audience interest in the station and its programs is promoted through use of on-the-air spots, how the engineering department operates, how commercials are produced and edited, and how music is selected for all phases of programming. At Cablevision, technical bench repairs help interns to repair electronic equipment used in cable television system operations. Students might work in photography learning darkroom procedures and how to process motion pictures. Interns have learned general office accounting, filing, and switchboard operations. Interns have assisted in research-marketing surveys and have served as runners for the station.

Competency Goals

1. The intern will create commercials and prepare proposals for clients in sales and creative services.
2. The intern will observe "live shows" on radio or television, and see how a show is produced.
3. The intern will learn to operate cameras and lights, move sets, use the teleprompter, and answer phones during on-air games. They may inventory prizes mail prizes to winners, and discuss the ratings that estimate a program's audience size.
4. The intern may participate in some administrative duties as in planning meetings that deal with budget, production, promotion, public affairs, and art.
5. The intern will observe editing and sound dubbing in broadcast television. He will learn the basics on how to use the studio control board.
6. The intern may arrange an evening news format or write a news script for radio or television.
7. The intern will work in the studio and on-location operating video tape recording equipment.

Vocabulary

Boom - Crane-like device suspending a microphone or camera in mid air out of viewing range.

“Coming up” - Also called “stand-by”, a warning cue that production is about to go on the air.

Dolly - The movement of the camera toward or away from objects.

Dubbing - Transcribing sound from one recording medium to another.

Cue - The signal to begin.

Splice - Joining of two pieces of film or tape to form one continuous piece.

Spot - Synonym for announcement or commercial to be played (time bought by advertiser to promote his product).

Log - Breakdown of the day's broadcasting into seconds.

Cover - To get the widest shot possible with the T.V. camera.

Zoom - To make the camera's subject appear to move closer or away from the camera by moving elements in the lens.

Copy - The words of a commercial or news report.

Teleprompter - A device that rolls a script across a magnified screen and places it on the front of the camera so the talent can refer to it without losing eye contact.

Kicker - Closing that is humorous or heart warming.

Carts - Audio tapes used in production.



Emergency Medical Services

RADIOLOGY AND EMERGENCY MEDICAL SERVICES (MEDIC)

Overview

Two medical internships that are popular with students are radiology and emergency medical services (MEDIC). Each is a separate internship.

Radiology is the branch of medicine that deals with the use of radiation in the diagnosis and treatment of disease. With the use of x-rays, radiologists are able to diagnose disorders of the bones and internal organs and detect tumors and other abnormalities. Many forms of radiation are effectively used to treat cancer and other diseases. Interns observe and assist the radiologists and x-ray technicians whenever possible at Mercy Hospital, Charlotte Memorial, and Presbyterian Hospital.

Emergency Medical Services is an internship offered in the medical field that permits an intern to observe emergency vehicle operations, rescue operations and radio communications. Students assist in carrying equipment, logging in calls, and map reading the call locations in the ambulance with the emergency medical technicians.

Students interning in emergency medical services need good dexterity and physical coordination. They should be able to carry up to one hundred pounds. Good judgment under stress is vital. Courses in driver education, health, athletic training, and science prepare the interns for this career in medicine.

Content - Scope

Students interning in radiology observe and assist with the work of the radiologists and x-ray technologists. They may be rotated through all different areas of diagnostic radiology and therapy including general diagnostic, special procedures, portables, nuclear medicine, and CT scanning. They will observe routine x-raying, myelograms, discograms, arteriograms, and reading of x-rays by doctors.

Interns should be interested in a medical career and have a strong academic background in high school courses like chemistry, physics, biology, and mathematics. An intern for emergency medical services should have knowledge of first aid training and CPR.

Competency Goals

1. The intern will aid in simple patient care techniques.
2. The intern will help transport patients and assist some patients in getting ready for x-rays.
3. The intern may observe treatment of cancer patients with x-rays, and the production of radiographs of various body structures employing x-ray and radionuclides.
4. The intern will aid in equipment manipulation and darkroom procedures.
5. The intern may observe EMT's give emergency care for victim's illnesses or injuries as they ride in the ambulance on all calls.

Vocabulary

Orderly - Hospital attendant.

Myelogram - Study of spinal canal.

Ultra-sound - Soundwaves visualizing organs, tissues, and blood vessels.

Nuclear medicine - Technology where radioactive material is swallowed by the patient or injected and absorbed by the patient's internal organs. Because diseased tissues generally react differently from healthy ones when subjected to radioactive substances, the development of the disease can be diagnosed using special cameras or scanners to pick up radioactivity.

Floroscopy - Watching a patient's internal body movements on a monitor or a screen.

Barium sulphate - Solution patient drinks so the doctor can look for diseases, injuries, or defects in the patient's digestive tract.

T.F.D. - (target film distance).

Portables - X-rays taken in patient's room.

Pyleogram - X-ray of the kidney.

Radiographs - X-ray pictures.

Radiation therapy - Technology using radiation-producing machines to give therapeutic treatments—usually for treating cancer.

Discogram - Study of disks between vertebrae.

Arteriogram - Study of arteries.

E.M.T. - (emergency medical technician).

Thumper - Mechanical machine to C.P.R.

D.O.A. - (dead on arrival).

Code 3 - Airplane crash at Douglas International Airport.

Hematoma - Blow to the head (swelling filled with extravasated blood).

G.I. Bleed - Bleeding in the gastro-intestinal area.

Code 100 - Patient has cardiac arrest.

Backboard - Equipment used if back and neck injuries are involved to limit movement.

EMT paramedics - Personnel who use radio communications under the direction of a doctor and do more than the basic EMT. They use more complex equipment as the defibrillator and administer drugs orally or intravenously depending on state law.

EMT dispatchers - Personnel who receive and process calls for emergency medical assistance, and serve as a communication link between the medical facility and those who are attending emergency patients.

RESPIRATORY THERAPY

Overview

Three levels of workers compose the field of respiratory therapy: respiratory therapists, respiratory technicians, and respiratory assistants. Although therapists and technicians perform many of the same duties, therapists have a higher level of training and expertise and are therefore expected to teach and supervise. Assistants usually care for equipment and have little or no contact with patients. High school students interested in respiratory therapy should have an aptitude for health and health related courses. Moreover, they should be interested in the well being of people.

Content - Scope

During the 45 to 90 hours of internship exposure in Respiratory Therapy, a high school intern may observe all areas of the work, learn the names and uses of equipment, and assist in the areas of mobility and maintenance. The intern also participates in some training sessions. The work done by the intern may include observing or assisting with treatment ranging from "giving temporary relief to patients with asthma or emphysema to giving emergency care in cases of heart failure, stroke, bee stings, drowning, or shock." Any of these patients may require oxygen or other respiratory therapy. During training sessions "mock" cases may be set up so as to give students hands-on experience in areas in which they cannot legally assist during the times that real patients are being treated.

Competency Goals

1. The intern will gain minimum knowledge as to how the following equipment operates: bird respiratory, spirometer, mask and hand-held nebulizer, bronchodilator and pflex.
2. The intern will observe pulmonary function tests and learn some things about lung capacity, tidal capacity, and vital capacity in patients.
3. The intern will become knowledgeable as to how therapists analyze oxygen to make sure that patients are getting proper amounts.
4. The intern will learn to differentiate between two kinds of ventilators—controlled and assisted—and will observe how these are used with patients.
5. The intern will learn to measure amounts of saline which is put into nebulizers.
6. The intern will learn how to clean and store equipment.
7. The intern will keep a list of words and terminology which apply to the work of respiratory therapy and will demonstrate knowledge of them when he/she discusses his/her internship with teacher and community sponsors and his/her intern coordinator.

Vocabulary

Tital volume - Refers to amounts of air inhaled or exhaled during normal respiration.

Vital capacity - The volume of air that can be forcefully exhaled by a patient during maximum inspiration.

Total lung capacity - Volume of air in the lungs following a maximum inspiration.

Bronchodilator - A medication that helps to relax the bronchial muscles of a patient who has asthma or emphysema.

Controlled ventilation - A mode of ventilatory assistance in which the ventilator delivers a set rate and volume of air to a patient, independent of effort on the part of the patient.

Assisted ventilator - A mode of ventilation in which the ventilator cycles in response to a patient's effort.

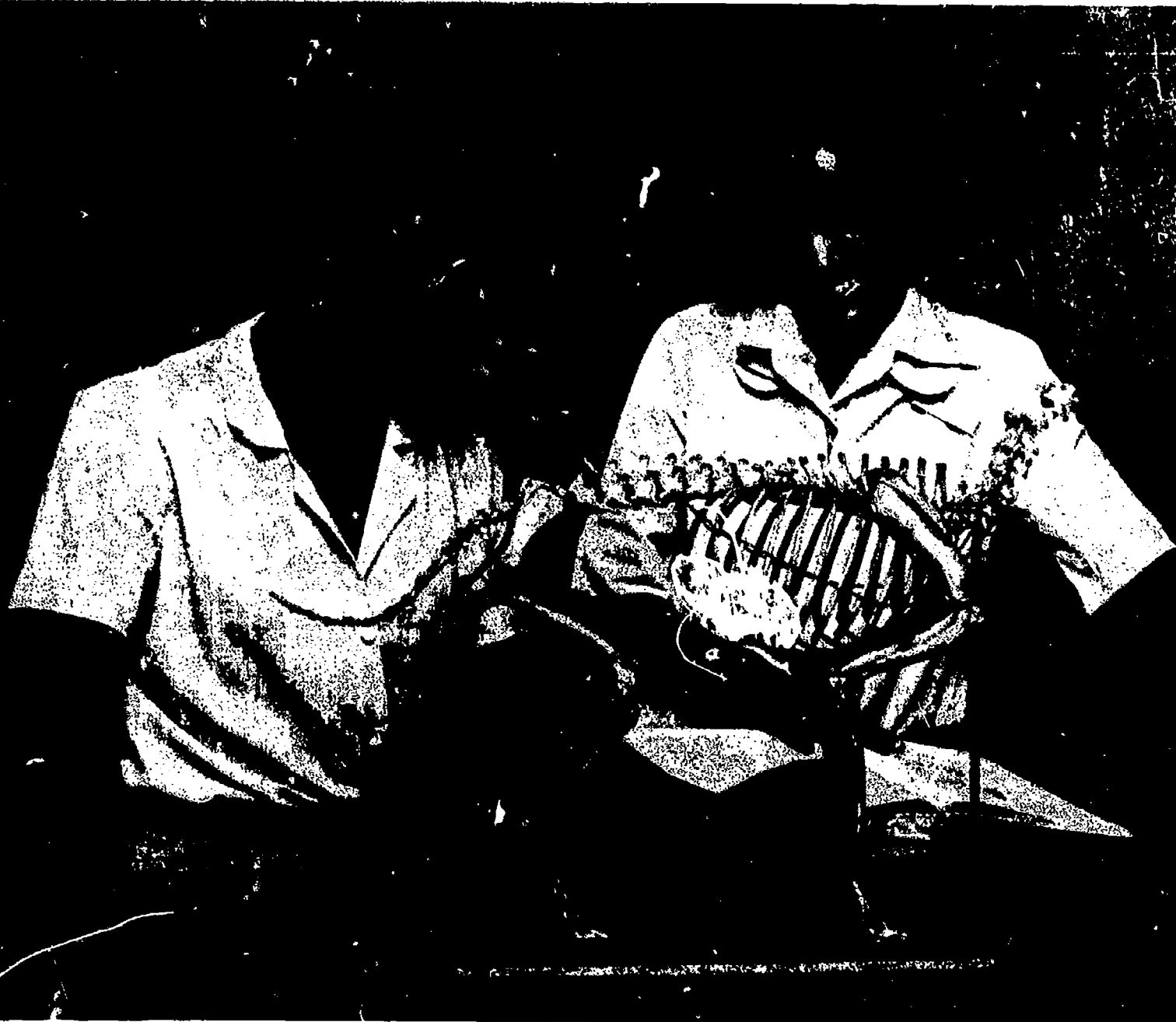
Bird Respirator - A machine used with a mouth piece or mask to inflate a patient's lungs.

Hand-Held Nebulizer - Used in the form of masks to help patients inhale medications.

Blood gases - A test used to determine the effectiveness of a patient's ability to ventilate his lungs of oxygen into blood; determining the amount of oxygen in blood.

IPPB - (intermittent positive pressure breathing) - A treatment modality that helps to remove secretion from the patient's lungs by intermittently inflating the lungs with mixtures of oxygen and air.

Pfex - A trade name for a device used to strengthen respiratory muscles.



Veterinary Medicine

VETERINARY MEDICINE

Overview

Veterinary training could include exposure to the work of government meat inspectors; scientists investigating the mysteries of diseases; or persons specialized in the health and breeding of cattle, poultry, sheep, swine, or horses—all of whom may be veterinarians. However, students who explore veterinary medicine through the AIP, work with veterinary doctors who treat and control animal diseases and injuries of small and/or large animals exclusively.

More than twenty veterinary doctors in the Charlotte-Mecklenburg area work regularly with high school interns allowing them to observe and have hands-on experiences. Students interested in pursuing a career in veterinary medicine should do well in science courses.

Content - Scope

During 45 to 180 hours of internship experience, students are exposed to the daily routine of a veterinary clinic or hospital. They may observe and/or assist with examinations, administering of medicine, surgery as well as office procedures and maintenance.

Competency Goals

1. The intern will observe major and minor surgery and will assist the doctor with some tasks during examinations and during the administering of medicine.
2. The intern will learn methods of taking temperatures, will admit and discharge animals, and will learn how to properly restrain animals.
3. The intern will assist with and learn office maintenance and management procedures.
4. The intern will observe the work of radiology and laboratory technicians.
5. The intern may learn how to make laboratory specimen tests and how to identify some parasites with the use of microscopes and x-ray pictures.
6. The intern will learn how heart worm checks are made.
7. The intern will keep a list of basic words and terminology with definitions which relate to veterinary medicine and will demonstrate his/her understanding of the terms when he/she discusses his/her internship with his teacher sponsor, community sponsor, and intern coordinator.

Vocabulary

Neuter - To surgically remove testicles of male dogs, tom cats or any male animal.

Spay - To surgically remove ovaries of female animals, (dogs, cats, or other animals); to sterilize.

Distemper - A infectious virus or disease of young dogs.

DHLP Vaccine - Vaccine to protect against distemper, hepatitis, leptospirosis, and bronchitis.

Leptospirosis - An often fatal disease of livestock, dogs and rats that can be transmitted to man; caused by a spirochete and takes the form of a fever and infectious jaundice; usually transmitted as a result of contact with the excretions of infected animals.

Spirochete - Any of the large group of slender spiral, very flexible and active microorganisms that are usually classed as bacteria.

Hepatitis - A virus disease transmissible to man. Symptoms: inflammation of the liver accompanying various diseases such as infectious hepatitis, characterized by jaundice. Severe forms of leptospirosis usually produce a type of infectious hepatitis.

Jaundice - An unhealthy body condition caused by an excess of bile pigments in the blood. It affects hair, skin, and eyes. It is a symptom of some diseases and ailments such as hepatitis.

Rabies - Virus disease transmissible to man.

Heartworms - Parasites living within the heart and transmitted by mosquito bites. Cats and humans are among animals that do not get heartworms.

Parvo - Intestinal disease that inflames the intestinal tract causing diarrhea, vomiting, and sometimes death; occurs most often in puppies and is transmitted from one dog to another.

Parvo vaccine - An injection to prevent parvo disease.

Fecal check - The testing of feces for round, hook whip, and tape worms.

Fecal sol - Flotation solution used in fecal checks.

Intravenous (I.V.) - A method using a needle and bottle solution to transmit needed medicine into the bloodstream.

APPENDIX

On the following pages are examples of how various community sponsors have scheduled their student interns.

FIRST COMPUTER SERVICES, INC.

STUDENT ACADEMIC INTERNSHIP

January 28	15:30 - 16:30	Orientation of Computer Operations John Aldridge, Operation Manager
	16:30 - 18:30	Orientation of Computer Room Shift Manager
January 31	15:30 - 16:30	Receipt & Dispatch/Microfilm Ed Ford, Manager
	16:30 - 18:30	Receipt & Dispatch Shift Manager
February 4	15:30 - 16:30	Tape Library Ed Ford, Manager
	16:30 - 18:30	Application Processing/Tape Pool Shift Manager
February 7	15:30 - 18:30	Application Processing/Tape Pool Shift Manager
February 11	15:30 - 18:30	Printer Operations Shift Manager
February 14	15:30 - 18:30	Microfilm Processing Shift Manager
February 18	15:30 - 18:30	Computer Scheduling Shift Scheduler
February 21	15:30 - 16:30	Systems Development Joe Shampine, Department Manager
	16:30 - 18:30	Application Processing/Tape Pool Shift Manager
February 25	15:30 - 18:30	Network Operations Tom Henderson
February 28	15:30 - 18:30	Printer Operations Shift Manager
March 3	15:30 - 16:30	Item Processing Charlie Welch, Manager
	16:30 - 18:30	Check Sorting Operation Item Processing Supervisor
March 6	15:30 - 18:30	Application Processing/Tape Pool Shift Manager
March 10	15:30 - 18:30	Computer Scheduling Shift Scheduler
March 13	15:30 - 16:30	Data Processing (Discussion) John Aldridge, Operations Manager Skip Klapheke, Division Manager
	16:30 - 18:30	Computer Room Overview Shift Manager

**Charlotte Memorial Hospital
Laboratory Technology
High School Student Intern Schedule**

Cathey Mondays & Thursdays, 14:15 to 17:15

Joni Mondays & Wednesdays, 13:00 to 16:00

First week starting Nov. 5

Cathey hematology

Joni blood bank

Second week starting Nov. 12

Cathey blood bank

Joni microbiology

Third week starting Nov. 19

Cathey microbiology

Joni chemistry

Fourth week starting Nov. 26

Cathey chemistry

Joni histology-cytology

Fifth week starting Dec. 3

Cathey histology-cytology

Joni hematology

Sixth week starting Dec. 10

both miscellaneous & elective

Seventh week starting Dec. 17

both elective

Duke Power Company Mechanical Engineering High School Internship Program Schedule

SESSION 1

SESSION 2

Introduction 1-10
R & D, Facilities
Marshall Weaver

Systems 1-14
Bob Misenheimer

Equipment 1-23
Gene Edwards

Project Design 1-30
Instrumentation/Materials
Dave Waugh; Larry Coggins

Station Services 2-12
Jeff Richardson

Team Production 2-19
Don Gabriel

Project Engineer 2-26
Milton Hopkins

Projects Design 1-16
Piping/Model Shop
Terry R. Demmery

Field Trip 1-25
McGuire
Gene Edwards

Analysis 1-28
Stress/Supports
Phil Croft

Station Support 2-13
Ferman Wardell
Ace Summerlin

Field Trip 2-19
Fossil Unit
Stan Holland

Field Trip 2-26
Catawba
Construction
Milton Hopkins

LAW ENFORCEMENT

MEMORANDUM

TO: ALL COMMAND PERSONNEL
FROM: ASSISTANT CHIEF D. G. LUTRICK
SUBJECT: ACADEMIC INTERNSHIP PROGRAM

We have elected to become a sponsor for an intern from Myers Park High School. This entails the placement of a student in the department from November 5, through December 1, to provide an opportunity for the student to explore career interest and establish positive relationships between the student, the school, and the community.

The intern we will sponsor is Andy Berry, a senior at Myers Park. Listed below is his schedule of assignments; if there are any conflicts, please let this office know. All assignments should be made as interesting as possible.

MONDAY Nov. 5	TUESDAY Nov. 6	WEDNESDAY Nov. 7	
09:00-Orientation, Personnel & Training 10:30-Planning & Research 12:00-Lunch 13:00-C.I.D. 15:00-End of training	09:00-Communications Section 12:00-Lunch 13:00-Communications 15:00-End of Training	09:00-Crime Prevention 11:00-School Resource Program 12:00-Lunch 13:00-School Resource Program 15:00-End of training	
SATURDAY Nov. 10*	SATURDAY Nov. 17*	SATURDAY Nov. 24*	SATURDAY Dec. 1*
15:00-Uniform Patrol Supervisor 19:00-End of training	15:00-Communications Section 19:00-End of training	15:00-Lakes Enforce- ment 19:00-End of training	15:00-Uniform Patrol Supervisor 19:00-End of training

*Hours on these dates can be changed if necessary.

DGL:kh

TELEVISION

WBTB HIGH SCHOOL STUDENT INTERN PROGRAM

DAY 1	DATE 1/14 4 to 5 pm 5 to 6 pm 6 to 7 pm	ORIENTATION INTRODUCTION TO EVENING STAFF OBSERVE LIVE NEWS SHOW
DAY 2	DATE 1/15 4 to 5 5 to 6 6 to 7	INTRODUCTION TO TV PRODUCTION STUDIO 1-ASSIST PRODUCTION STAFF OBSERVE LIVE NEWS SHOW
DAY 3	DATE 1/21 3 to 4 4 to 6	INTRODUCTION TO GRAPHICS ASSIST PRODUCTION STAFF
DAY 4	DATE 1/22 4 to 5 5 to 7	INTRODUCTION TO SALES STUDIO 1
DAY 5	DATE 1/28 3 to 4 4 to 6	INTRODUCTION TO ENGINEERING STUDIO 1
DAY 6	DATE 1/29 4 to 4:30 4:30 to 5 5 to 7	INTRODUCTION TO PROGRAMMING INTRODUCTION TO PROMOTION STUDIO 1
DAY 7	DATE 2/4 3 to 6	INTRODUCTION TO STUDIO CAMERA AND PORTABLE VIDEO CAMERA
DAY 8	DATE 2/5 8:30 to 12:30 12:30 to 1:30 1:30 to return	CTU 1 INTRODUCTION TO NEWS VISIT TALL TOWER
DAY 9	DATE 2/11 3 to 6	INTRODUCTION TO NEWS PHOTOGRAPHY
DAY 10	DATE 2/12 4 to 4:30 4:30 to 5 5 to 7	INTRODUCTION TO DATA SERVICES INTRODUCTION TO EXTRAVISION STUDIO 1
DAY 11	DATE 2/18 3 to 4 4 to 6	INTRODUCTION TO PRODUCING STUDIO 1

DAY 12 **DATE 2/19**
4 to 5
5 to 7

**INTRODUCTION TO DIRECTING
STUDIO 1**

DAY 13 **DATE 2/25**
3 to 4
4 to 6

**INTRODUCTION TO VIDEO EDITING
STUDIO 1**

DAY 14 **DATE 2/26**
4 to 7

EVALUATION AND CONCLUSION

**Presbyterian Hospital School of Nursing
Orientation Schedule
Academic Internship Program**

OBJECTIVES

- Observe and/or participate in activities in a department of the hospital in which the student has shown interest.
- Gain some knowledge of hospital routines, procedures, and use of equipment.
- Observe interpersonal relationships between staff, patients, and visitors.

Thursday, April 21

- I. Meet in Presbyterian Hospital lobby at 3:00 p.m. sharp!
- II. Lab orientation - Pat Hall
- III. "More In Your Favor" - Videotape
- IV. "Getting to Know You" - A group project
- V. Guidelines for interns during affiliation
 - A. Policies & regulations affecting students
 - B. Emergency & safety codes
- VI. Ethics and the hospital
- VII. "A Gift from Mrs. Timms" - Videotape
- VIII. Medical Terminology

Friday, April 22

- I. Meet in Classroom #5 at 3:00 p.m. sharp!
- II. "This is Presbyterian" - Slide Presentation
- III. Meet Mr. Bullard
- IV. Tour of Presbyterian Hospital
- V. Clinical areas open to students
 - A. 4-A (General Medical Unit) - Adults
 - B. (Pediatrics) - children and adolescents
 - C. 6-C (Maternity Unit) - Adults
 - D. 7-C (Cancer Unit) - Adults
- VI. "Viewpoint - The Dying Patient" - Filmstrip

Saturday, April 23

- I. Meet in Classroom #6 at 9:00 a.m.
- II. Review of the guidelines
- III. Quiz on PH policies and intern responsibilities
- IV. "Mister You Made a Big Mistake In My Bill" - Videotape
- V. "Finding My Way Around PH" - A practice round
- VI. Lunch
- VII. "Lifting, Moving, and Transporting Patients"
 - A. "Prognosis Safety" - 16mm film
 - B. Transporting Patients by Wheelchair and Stretcher
 - C. Infection Control
- VIII. "Dimensions" - Movie
- IX. Scheduling clinical experiences

Each intern will schedule a 20 and 40 hour evaluation with me.
Have all journals up-to-date!

Final evaluation

Date: May 30

Last clinical date: May 28

Schedule a 20 hour evaluation: Week of May 9-13

All evaluations will be held in my office!

**Clinical Areas
Presbyterian Hospital
Academic Internship Program**

Interns may work on the following units:

- 4A General Medical Unit-Adults**
Thursday, Friday, Saturday
- 2A Pediatrics-Children/Adolescents**
Monday, Tuesday, Saturday
- 6D Gynological and/or Maternity Unit-Women**
Open to female internship students only
Monday-Saturday
- 7C Cancer Unit**
Monday-Saturday

For scheduling purposes, you may work from 4-8 p.m. during the weekdays and Saturday mornings from 8 a.m. - 1 p.m.

You may choose only one area for your clinical. This will help our staff see and get to know one familiar face, instead of you only working a couple of hours on each unit.

You need to work out your schedule so that you can be on that unit the same time and same days each week.

You will need to purchase a lab jacket or lab coat.