MEDIA ARTS AND TECHNOLOGY

The Media Arts and Technology Program provides students with the opportunity to earn an Associate of Science Degree in Media Arts and Technology. Students in the Associate Degree may choose to specialize by pursuing an optional concentrations of study: Audio Engineering Concentration (MRTA), or Video/Film Concentration (MRTV)*. Upon completion of a concentration of a program, students are prepared for careers in video and film production, sound recording, broadcasting, or a number of other communications industries. During the course of study, students develop technical and communications skills through academic coursework, production skills training, and real-world experience.

*Students may graduate with only one concentration.

MEDIA ARTS AND TECHNOLOGY (MRT)

The mission of the Media Arts and Technology department is to offer applied and theoretical instruction for students interested in a career in the media arts. Emphasis is placed on practical training in MWCC's professionally equipped media facilities, communication skills, and the characteristics of converging media industries. Students gain professional experience participating in a variety of college and community projects.

The flexible program requirements allow students to concentrate in Audio Engineering or Video/Film Production; or to design a program of study to meet their individual career and transfer goals.

Year 1		
Fall		Credits
MAT 126	Topics In Mathematics (or higher)	3
ENG 101	College Writing I	3
MRT 105	Introduction To Mass Media	3
Production Elective I (see list below)		3
Production Elective II (see list below)		3
Spring		
ENG 102	College Writing II	3
MRT 106	Introduction to Human Communication	3
Non-behavioral Social Science Elective ¹		3
Production Elective III (see list below)		3
Professional Elective I (see list below)		3
Year 2		
Fall		
SPC 113	Speech	3
Behavioral Social Science Elective ²		3
PHY 103	Physics of Light and Sound	4
Humanities Elective ³		3
Professional Elective II (see list below)		3
Spring		
MRT 123	Film Studies	3
MRT 228	Self Promotion and the Business of Media Arts	3
Professional Elective III (see list below)		3
MGT 110	Introduction to Business	3
General Elective ⁴		3
	Total Credits:	61

Non-behavioral Social Science Electives: See Elective Courses by Abbreviation (http://catalog.mwcc.edu/electivecoursesbyabbreviation/).

Behavioral Social Science Electives: See Elective Courses by Abbreviation (http://catalog.mwcc.edu/electivecoursesbyabbreviation/).

Humanities Electives: See Elective Courses by Abbreviation (http://catalog.mwcc.edu/electivecoursesbyabbreviation/).

⁴ General Electives: See General Electives (http://catalog.mwcc.edu/electivecoursesbyabbreviation/) exceptions.

Production Electives

		Credits
MRT 110	Fundamentals of Video Production	3
MRT 112	Introduction to Audio Production	3
MRT 122	Audio Post-production	3
MRT 129	Video Post-production	3
MRT 211	Advanced Audio Production	3
PHO 115	Introduction To Digital Photography	3
MRT 205	Corporate Video Production	3

Professional Electives

		Credits
MRT (any course)		3
ART 109	Art History I	3
ART 110	Art History II	3
ART 251	Two-Dimensional Design	3
ART 263	Drawing I	3
ENG 239	Creative Writing I	3
ENG 240	Creative Writing II	3
ENG 241	Journalism I: Media Writing	3
ENG 242	Journalism II: Advancing Newswriting	3
GID 101	Design Theory	3
GID 104	Digital Imaging (Photoshop)	3
GID 109	Introduction To Web Design	3
MKT 142	Marketing	3
THE 101	Fundamentals Of Acting	3
THE 103	Introduction To Theatre	3
THE 184	Technical Theatre Practicum I	3
THE 185	Technical Theatre Practicum II	3

Campus

This program is offered on the Gardner campus only.

Transfer Options

For transfer options, please click here (http://catalog.mwcc.edu/academicresources/#transferinformationtext). It is recommended that you also consult with your academic advisor.

Special Requirements

Technical standards must be met with or without accommodations.

The Media Arts & Technology Department does not offer any student the following:

MEDIA ARTS AND TECHNOLOGY

- Special classes.
- A reduced standard for academic performance.
- Exemption to graduation requirements.
- Credit for effort in place of demonstrated competence or skill acquisition.

Career Options/Earning Potential

For career options, please click here (https://mwcc.lightcastcc.com/programs/media-arts-and-technology-non-concentrated-associate-degree/166957/?region=North%20Central%20MA/Southwest%20NH&radius=).

AUDIO ENGINEERING CONCENTRATION (MRTA)

A Degree in Media Arts and Technology

Courses in the Audio Engineering Concentration focus on skills necessary to pursue positions in professional sound engineering. Through hands-on training, specialized classroom study, and research, students receive training in all aspects of the industry. Graduates can explore careers in music, radio, television, cinema, gaming, and theatre.

Year 1		
Fall		Credits
MAT 126	Topics In Mathematics (or higher)	3
MRT 112	Introduction to Audio Production ¹	3
ENG 101	College Writing I	3
MRT 110	Fundamentals of Video Production	3
MRT 105	Introduction To Mass Media (Formerly BCT 105)	3
Spring		
ENG 102	College Writing II	3
MRT 122	Fundamentals of Audio Postproduction ¹	3
MRT 106	Introduction to Human Communication	3
Behavioral Social Science Elective ²		3
Non-behavioral Social Science Elective ³		3
Year 2		
Fall		
MRT 211	Advanced Audio Production ¹	3
MRT 217	Critical Listening for Audio Engineers ¹	3
PHY 103	Physics of Light and Sound	4
MGT 110	Introduction to Business	3
SPC 113	Speech (formerly THE113)	3
Spring		
MRT 224	Music Recording and Mixing Techniques ¹	3
MRT 225	Live Sound Reinforcement	3
MRT 228	Self Promotion and the Business of Media Arts	3
MRT 123	Film Studies	3
General Elective ⁴		2-3
	Total Credits:	60-61

- Students enrolled in MRTA must earn a grade of C or better in this course.
- Behavioral Social Science Electives: See Elective Courses by Abbreviation (http://catalog.mwcc.edu/electivecoursesbyabbreviation/).
- Non-behavioral Social Science Electives: See Elective Courses by Abbreviation (http://catalog.mwcc.edu/electivecoursesbyabbreviation/).
- ⁴ General Electives: See General Electives (http://catalog.mwcc.edu/electivecoursesbyabbreviation/) exceptions.

Campus

This program is offered on the Gardner campus only.

Transfer Options

For transfer options, please click here (http://catalog.mwcc.edu/academicresources/#transferinformationtext). It is recommended that you also consult with your academic advisor.

Special Requirements

Technical standards must be met with or without accommodations.

Career Options/Earning Potential

For career options, please click here (https://mwcc.lightcastcc.com/programs/audio-engineering-media-arts-and-technology-associate-degree/166957/?region=North%20Central%20MA/Southwest%20NH&radius=).

VIDEO/FILM CONCENTRATION (MRTV)

A Degree in Media Arts and Technology

Students specifically interested in careers in video, television, filmmaking, or related industries may elect to complete this course of study. Students experience all aspects of preproduction, studio and location recording, and postproduction editing. Instruction includes extensive hands-on experience. Throughout the production process, emphasis is placed on efficient message design, effective storytelling techniques, and thorough preproduction planning.

	Total Credits:	60-61
General Elective ⁴		2-3
Behavioral Social Science Elective ³		3
MRT 228	Self Promotion and the Business of Media Arts	3
MRT 222	Multi-camera Video Production (Fmrly. MRT121 TV Operations and Multicamera Studio Prod.)	3
MRT 216	Advanced Video Production	3
Spring		
SPC 113	Speech (formerly THE113)	3
MGT 110	Introduction to Business	3
MRT 123	Film Studies	3
PHY 103	Physics of Light and Sound	4
MRT 205	Corporate Video Production	3
Fall		
Year 2		
Non-behavioral Social Science Elective ²		3
MRT 106	Introduction to Human Communication	3
MRT 122	Fundamentals of Audio Postproduction ¹	3
MRT 129	Video Post Production (Formerly Editing Digital Video)	3
ENG 102	College Writing II	3
Spring		
MRT 105	Introduction To Mass Media (Formerly BCT 105)	3
MRT 112	Introduction to Audio Production	3
ENG 101	College Writing I	3
MRT 110	Fundamentals of Video Production ¹	3
MAT 126	Topics In Mathematics (or higher)	Gredits 3
Fall		Credits
Year 1		

Students enrolled in MRTV must earn a grade of C or better in this course.

Campus

This program is offered on the Gardner campus only.

Transfer Options

For transfer options, please click here (http://catalog.mwcc.edu/academicresources/#transferinformationtext). It is recommended that you also consult with your academic advisor.

Special Requirements

Technical standards must be met with or without accommodations.

Non-behavioral Social Science Electives: See Elective Courses by Abbreviation (http://catalog.mwcc.edu/electivecoursesbyabbreviation/).

Behavioral Social Science Electives: See Elective Courses by Abbreviation (http://catalog.mwcc.edu/electivecoursesbyabbreviation/).

⁴ General Electives: See General Electives (http://catalog.mwcc.edu/electivecoursesbyabbreviation/) exceptions.

Career Options/Earning Potential

For career options, please click here (https://mwcc.lightcastcc.com/programs/video-film-media-arts-and-technology-associate-degree/166957/?region=North%20Central%20MA/Southwest%20NH&radius=).

PROGRAM STUDENT LEARNING OUTCOMES FOR MRT, MRTA, MRTV

Upon graduation from this program, students shall have demonstrated the ability to:

- Analyze and describe the component sectors, interrelationships, technology, and the legal and business practices associated with the media arts, and apply this understanding to projections for future developments and opportunities.
- Explain, analyze, and evaluate the media's power and role in and on today's society, and the legal and ethical issues that confront communications professionals.
- Set up and operate production equipment, and explain working interrelationships of the technical components.
- Demonstrate oral and written presentation skills unique to the media arts industry.
- Specify and design media solutions to fulfill identified communications objectives.
- Work individually and as part of a production team in developing communications projects from initial conception to final completion, while meeting industry-standardized guidelines.
- Employ media aesthetics to maximize communications effectiveness and create audience interest.
- Analyze career opportunities and individual strengths, apply effective job search and acquisition skills, and promote their professional skills and services in today's marketplace.

In addition, students concentrating in Audio Engineering (MRTA) shall have proven:

- A clear command of microphone choice, placement, technique, and treatment for varying tasks.
- Awareness of advanced audio signal paths, processing needs, and choice of processing order to acquire desired results.
- An ability to recognize through listening, the causes of quality in electronically handled sounds, with appreciation for what contributes to professional results and knowledge of remedies for improving what is poor.
- An understanding of technically assisted communication that compels a listener to embrace a message, story or song.

In addition, students concentrating in Video/Film (MRTV) shall have proven:

- An understanding and critical appreciation of the history, theory, and technique common to effective film and video production.
- · Mastery of advanced camera, lighting, editing and directing skills, and postproduction workflows.
- The ability to integrate strong technical expertise, knowledge of communication theory, and creative storytelling technique to produce visually compelling production.

TECHNICAL STANDARDS 1 FOR MRT, MRTA, MRTV

For general information about technical standards and accommodation, see Technical Standards. (http://catalog.mwcc.edu/academicresources/academicandgradingpolicies/technicalstandards/)

Students entering this program must be able to demonstrate, with or without a reasonable accommodation, the ability to:

- Communicate and assimilate information either in spoken, printed, signed, or computer voice format.
- Communicate effectively both verbally and in writing.
- Gather, analyze, and draw conclusions from data.
- Distinguish the movement of meter displays, positions of knobs on equipment, and images through camera lenses and/or small camera screens.
- Make precisely coordinated movements of the fingers to grasp, move, manipulate, or assemble small objects (e.g. connecting wires, cables, and adjusting small buttons and knobs).
- Differentiate content, tones, and words in sound recordings.
- Focus on a single source of sound in the presence of other distracting sounds.
- Work collaboratively as a member of a production team.
- Appropriately use production equipment with regard to care and safety of the equipment, its user/s and nearby people.

Failure to comply with the above technical standards may result in a student being academically unsuccessful in the MRT program. Further, any action or behavior that disrupts the normal operation of the classroom may be referred to the College's Code of Conduct process.

According to the College's Code of Conduct, students may be financially responsible for causing damage or loss to MWCCs production equipment or facilities. Students borrowing equipment will be responsible for caring for and returning that equipment in good condition.

INDUSTRY STANDARDS

Jobs within the various media industries require a wide range of physical and mental capacity for career success. Students seeking employment within these industries should review the following information carefully when deciding to engage in this course of study.

Tasks

Most jobs in media production require the following:

- Recording speech, music, or other sound on various types of equipment.
- Quickly setting up and taking down equipment used in recording, via audio/video/film, in studios or on location, of scripted, produced, or live performances.
- Loading and unloading equipment that may be in excess of 50 lbs. in/from storage rooms, vans, or production trucks.
- Quickly choosing most appropriate equipment (e.g. microphones, lenses, lights, stands).
- Carrying, connecting, tracing, and coiling various cables.
- Documenting equipment settings, content, and technical notes.
- Efficiently using specialized electronic equipment during production and post production.
- Troubleshooting and resolving issues with signal flow and software.

Skills

Careers in the Media Arts typically demand the following skills:

• Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made and asking questions for clarification as appropriate.

- Speaking Talking to others to convey information effectively.
- Critical Thinking Using logic and reasoning to identify alternative solutions, conclusions, and approaches to problems.
- Reading Comprehension Understanding written sentences and paragraphs in work-related documents, production documentation, and equipment manuals.
- Complex Problem Solving Identifying complex problems and reviewing all necessary information to develop and evaluate options and implement solutions.
- Active Learning Understanding the implications of new information for both current and future problem-solving, troubleshooting, and decision making.
- Operation and Control Controlling operations of equipment or systems.
- Troubleshooting Determining causes of operating errors and deciding what to do about it.
- Equipment Selection Determining the kind of tools and equipment are needed to complete a job safely and efficiently.

Students with disabilities

MWCC's Media Arts & Technology program will comply with Section 504 of the Rehabilitation Act of 1973 and Title III of the Americans with Disabilities Act of 1990. The mission of the department is to train individuals for technical and/or non technical entry-level positions within various media industries. Mount Wachusett Community College's ADA Policy outlines accommodations available to students with disabilities. It is strongly recommended that prior to investing time and monetary resources, a prospective student with a known disability meet with the Coordinator of Disability Services to discuss their potential for success in the Media Arts Industries.

Persons with disabilities in any of the following areas are urged to speak to the Coordinator of Disability Services about these before entering this course of study:

- Near Vision The ability to see details at a close range (e.g. reading dial or meter settings on production equipment and camera screens).
- Oral Expression The ability to communicate information and ideas in speaking so others will understand.
- Oral Comprehension The ability to listen and understand information and ideas presented through spoken words and sentences.
- Written Expression The ability to communicate and ideas in writing so others can understand (e.g. production documentation).
- Hearing Sensitivity The ability to detect or tell the differences between sounds that vary in pitch and loudness.
- Information Ordering The ability to arrange things or actions in a certain order or pattern (e.g. signal flow, color coding).
- Selective Attention The ability to focus on a single source of sound in the presence of other distracting sounds.
- Sound Localization The ability to tell the direction from which a sound originated.
- **Deductive Reasoning** The ability to apply general rules to specific problems to produce answers that make sense.
- **Finger Dexterity** The ability to make precisely coordinated movements of the fingers to grasp, move, manipulate, or assemble small objects (e.g. connecting wires, cables, and adjusting small buttons and knobs).
- Time Sharing The ability to shift back and forth between two or more activities or sources of information.
- Memorization The ability to remember information such as words, numbers, and procedures.

MRT 105. Introduction To Mass Media. 3 Credits.

Students examine the effects and impact of the mass media on contemporary life. Emphasis is on the influence of television, film, radio, Internet, and print media in such areas as entertainment, news, politics, advertising, popular culture, and human behavior. Formerly offered as BCT 105. Prerequisites: ENG 098, FYE 101, RDG 098, or placement.

MRT 106. Introduction to Human Communication. 3 Credits.

The course introduces students to key concepts, perspectives, research fields, and methods in the study of human communication. Weekly content balances theoretical approaches and practical skill development. The role of the individual and the influence of society in communication processes are discussed. Prerequisite: ENG 098, FYE 101, RDG 098, or placement.

MRT 110. Fundamentals of Video Production. 3 Credits.

Students are introduced to the basics of video recording and editing. Instruction focuses on developing the pre-production, production, and post production expertise required to successfully plan and execute video programs. An overview of video technology is included. MRTV students must earn a C or better in the course. Fall (days). Spring (nights). Prerequisites: ENG 098, FYE 101, RDG 098, or placement; Corequisite: MRT 112 or permission of Dean.

MRT 112. Introduction to Audio Production. 3 Credits.

Students are introduced to the basic procedures and skills used by audio professionals. In order to achieve a basic understanding of sound as it relates to media productions, students perform recording and editing techniques of dialog, radio style production, as well as studio and location sound practices used for video and film. Two hours lecture and two lab hours per week. MRTA students must earn a C or better in the course. Fall (days). Spring (nights). Prerequisites: ENG 098, FYE 101, RDG 098, or placement; Corequisite: MRT 110 or permission of Dean.

MRT 122. Audio Post-production. 3 Credits.

Students are introduced to equipment, procedures, and techniques used on location and in studios for careers in audio for the television and film industries, with an emphasis on post production signal processing and editing. This course builds on the information and skills acquired in MRT 112 Introduction to Audio Production. Two hours lecture and two hours lab per week. MRTA and MRTV students must earn a C or better in the course. Formerly offered as BCT 122. Prerequisites: MRT 112. Spring.

MRT 123. Film Studies. 3 Credits.

The course introduces students to key concepts of film analysis and production, including film narration, language, technology, history, genres, styles, and issues of gender, ethnicity, and identity. American and global cinemas will be discussed. Prerequisites: ENG 098, FYE 101, RDG 098, or placement.

MRT 129. Video Post-production. 3 Credits.

Building on their knowledge of video production, students will develop expertise in the technology and techniques of digital, nonlinear editing. This course introduces the fundamental concepts, terminology, and operation of nonlinear editing systems. Throughout the course, students develop an understanding of the techniques and aesthetics video and film editors employ as effective storytellers. Using industry standard, nonlinear editing systems, students practice applying the craft of editing, assembling sequences of pictures and sounds to create finished programs including titles, graphics, and special effects. MRTV students must earn a C or better in the course. Prerequisite: MRT 110. Spring.

MRT 202. Media Arts & Technology Internship I. 3 Credits.

In this course, students earn academic credit while gaining on-the-job experience and training at a broadcast operation or other electronic media-related facility. The student's performance is evaluated by the instructor and the employer. The student will participate in periodic seminars with the course coordinator, and must prepare a detailed account of the internship at the end of the semester. Offered occasionally. Prerequisites: Minimum of 21 college-level credit hours completed.

MRT 204. Lighting and Directing. 3 Credits.

In this course, students will explore principles of lighting, various tools of lighting, and fundamental and advanced lighting techniques. In addition, the course will introduce students to directing approaches and styles. Image control and directing tasks in all production stages will be addressed, as well as applications in single and multi-camera production environments. MRTV students must earn a C or better in this course. Prerequisites: MRT 129. Fall.

MRT 205. Corporate Video Production. 3 Credits.

In this course, students will explore various forms and modes of corporate video production, such as promotional, instructional, educational, and corporate identity-building videos. Instruction emphasizes an analysis of clients' needs, target audiences, and distribution platforms, including social media. Students will combine essential tasks of all production stages to produce short corporate videos in professional, real life-based scenarios. MRTV students must earn a C or better in this course. Prerequisites: MRT 112, MRT 129. Fall.

MRT 211. Advanced Audio Production. 3 Credits.

This course builds on information and skills acquired in MRT 112 and MRT 122. Students gain competency with configurations of complex audio systems, matrixes of multibus mixers, digital mixers, advanced techniques in dialog recording, tone shaping, and music editing. Foley work, sweetening, and mixing for picture are major parts of this course. MRTA students must earn a C or better in the course. Prerequisite: MRT 122; MRT 217 (Corequisite for MRTA students). Fall.

MRT 216. Advanced Video Production. 3 Credits.

This course focuses on advanced video production concepts and methods, such as effective pre-production, production, and postproduction workflows. It builds upon knowledge and skills students acquired in MRT 110 and MRT 129, and MRT 205. Course instruction emphasizes an advanced level of camera control techniques, including exposure, depth of field, composition, framing, and color. Students will work with various camera and lighting equipment, explore its application in diverse settings, and learn to create effective visual messages and narratives. Fundamental concepts of digital cinematography also will be discussed. MRTV students must earn a C or better in this course. Prerequisites: MRT 205. Spring.

MRT 217. Critical Listening for Audio Engineers. 3 Credits.

This course focuses on awareness of sound. Ear training and auditory recognition are developed through directed listening tasks, discussions, and research. Topics include types of listening, listening environments, sound systems and devices, eras in sound, including equipment and technique, with analytical study of sound engineers' choices in broadcast, cinematic and musical genres. MRTA students must earn a C or better in the course. Prerequisite: MRT 122; MRT 211 (Corequisite for MRTA students). Fall.

MRT 222. Multi-camera Video Production. 3 Credits.

This course encompasses the processes, equipment, facilities, and skills employed in television studio and multi-camera production. Emphasis is placed on the operation of cameras, switchers and related equipment, the responsibilities of the production crew, and the direction of live switched, multi-camera production. MRTV students must earn a C or better in the course. Formerly offered as MRT 121. Prerequisite: MRT 205. Spring.

MRT 223. Independent Study In Media Arts. 3 Credits.

This course is an advanced practicum experience in which the individual student, under the guidance of a staff member, develops their media arts skills at a professional level. Prerequisite: Permission of Division Dean. Offered occasionally.

MRT 224. Music Recording and Mixing Techniques. 3 Credits.

This course is the culmination of audio training at MWCC. Students are trained in methods of both recording and mixing music. Sonic spaces, microphone choice and placement, equipment preference and sequence, technical and personal etiquette in recording musical performances involving audiences, stages, or studios - are all practiced in hands-on training in small to large production crews. Mix training utilizes class recordings of live musicians and other prerecorded material. Students mix projects from start to finish, and assist or complete professional-level mixes with the instructor. Training in mastering is applied to an audio portfolio of the student's best to work to date. MRTA students must earn a C or better in the course. Prerequisite: MRT 211, MRT 217; MRT 225 (corequisite). Spring.

MRT 225. Live Sound Reinforcement. 3 Credits.

This course covers aspects of amplifying the sound of performances or presentations in various sized venues for in-person audiences. Students build skills in sound system: consideration configuration, testing, measuring, and safety. Hands on elements use equipment ranging from small format analog systems to top of the line Yamaha Rivage digital consoles. Techniques in mixing live performances are practiced utilizing mix skills acquired in the co-requisite course MRT 224 Music Recording & Mixing Techniques. Two lecture hours and two lab hours per week. MRTA students must earn a C or better in the course. Prerequisite: MRT 211, MRT 217; MRT 224 (corequisite). Spring.

MRT 228. Self Promotion and the Business of Media Arts. 3 Credits.

This course informs students of business structures and practices within the media arts industries and prepares them to advance their standings through self-promotion. Career alignment, employment options, compensations, ethics and responsibilities are covered. Students discover effective job searching and application strategies specific to media professionals. Techniques in promoting one's value are a major component of this course. Prerequisite: ENG 102. Spring.

PHO 115. Introduction To Digital Photography. 3 Credits.

This introductory course covers the technical and artistic aspects of capturing and editing digital images. Students will learn how to create artistic images for print and electronic distribution. Emphasis is placed on the camera and how to use it, lighting, electronic capture and manipulation techniques, and photographic composition. Basic computer skills are required: Ability to use a computer operating system and follow basic procedures including keyboarding/mouse skills, as well as system commands such as working with directories/folders, and opening/closing applications. Prerequisites: ENG 098, RDG 098, or placement.

PHO 215. Advanced Digital Photography. 3 Credits.

This course is designed to go beyond the basic skills learned in PHO 115 Intro to Digital Photography. It is designed to allow students to reach a new level of artistic achievement. Students will learn to maximize the strengths and minimize the weaknesses of this medium. The course incorporates use of the latest tools and techniques of digital capture and manipulation. It also uses some traditional film techniques that are modified slightly to apply to a digital environment. A fully adjustable digital camera is required. Point and shoot cameras, and cell phones are not suitable photographic instruments for this course. A tripod is strongly recommended. PHO and MRTP students must earn a C or better in the course. Prerequisite: PHO 115.

PHO 240. Portrait Photography. 3 Credits.

The art of photographing people is explored. Lighting, posing, and composition are covered. Various styles of portraiture are introduced. These include corporate portraits, casual and personality portraits, and wedding portraits; as well as more avant-garde styles such as film noire. Studio, location, and natural lighting will be used. Color balancing and facial retouching will be covered. A fully adjustable digital camera is required. Point and shoot cameras, and cell phones are not suitable photographic instruments for this course. A tripod is strongly recommended. PHO and MRTP students must earn a C or better in the course. Fall.

PHO 245. Commercial Photography. 3 Credits.

Some of the world's most artistic photos are made for the purpose of advertising. This exciting area of photography will be explored. In addition to small product and catalogue photography, this course explores the more complex and creative photographs used for various publication covers, web and magazine ads, and trade show displays. Advanced digital editing and manipulation will be discussed. Estimating and billing will also be covered. A fully adjustable digital camera is required. Point and shoot cameras, and cell phones are not suitable photographic instruments for this course. A tripod is strongly recommended. PHO and MRTP students must earn a C or better in the course. Prerequisite: PHO 115. Spring.