MATH 497. Undergraduate Research. 1-4 credits. Offered on demand.
Students pursue advanced research in a selected area of mathematics and/or statistics. Students must make arrangements with a supervising instructor prior to registration. Offered only with consent of the department head. Repeatable up to 6 credits.

MATH 499. Honors. 6 credits. Offered on demand.
Three-semester sequence (parts A, B and C with 1-4 credits each) totaling 6 credits. Two three-credit sequences are recommended. Prerequisite: Consent of SHP supervisor.

Media Arts and Design

SMAD 101. Introduction to Media Arts and Design. 3 credits.
Study of the historical evolution of today's media industries and career paths. Emphasis on contemporary issues affecting those industries and careers. Consideration given to emerging media, their required skills and social impacts. Prerequisite: Formal declaration for admission to the SMAD major.

SMAD 150. Mediated Communication: Issues and Skills. 3 credits.
Study of how mediated communication shapes the content, meaning and impact of spoken, written and pictorial messages. Emphasis on the skills required to integrate speech, text and image into mediated presentations. Consideration of issues involving the critical evaluation of mass-mediated communication, their effectiveness and influence. May not be used for major credit.

SMAD 201. Fundamental Skills in Media Arts and Design I. 3 credits.
Study of basic computer operating systems and the principles and practices of graphic production for digital and interactive media. Focus on tools and techniques used to create graphic content for diverse media delivery systems. Prerequisite: Admission to the SMAD major.

SMAD 202. Fundamentals Skills in Media Arts and Design II. 3 credits.
Study of the aesthetic principles and practices of web development and production, and digital audio and video production. Focus on the technological requirements of producing content for the web and video. Prerequisite: Admission to the SMAD major. Prerequisite or corequisite: SMAD 201.

SMAD 210. News Reporting and Writing. 3 credits.
The study and practice of the fundamentals of news writing, including news gathering techniques and news style. Emphasis on coverage of meetings, events and breaking stories. Consideration of writing across platforms including print, broadcast and online. Fulfills the College of Arts and Letters writing-intensive requirement for the major. Prerequisite: Admission to the major or permission of the instructor.

SMAD 220. Copy Editing. 3 credits.

SMAD 225. Photojournalism. 3 credits.
The study of visual information gathering for print media including photojournalism. Emphasis on photographic techniques and print media layout. Consideration of new visual technologies including the use of computers for electronic photo editing and design. Students must provide their own cameras. Prerequisites: Admission to the SMAD major and SMAD 201 or permission of the instructor.

SMAD 231. Writing for New Media. 3 credits.
Study of the principles and practices of writing for new media platforms. Emphasis on the nature of interactivity, narrative design, and the relationship between text, image, sound and video. Attention to the development of new media presentations designed to inform, persuade and entertain. Fulfills the College of Arts and Letters writing-intensive requirement for the major. Prerequisite: Admission to the SMAD major or permission of the instructor.

SMAD 241. Introduction to Corporate Communication. 3 credits.
Introduction to the study and practice of corporate communication. Students will explore the functions of a corporate communication department, the strategic planning process, and the various forms and techniques used in corporate media writing. Exercises in print, broadcast and interactive media writing will allow students to apply material in real and simulated situations and provide examples for portfolios. Fulfills the College of Arts and Letters writing-intensive requirement. Prerequisite: Admission to the SMAD major or permission of the instructor.

SMAD 242. Introduction to Advertising and Corporate Communication. 3 credits.
Introduces the fundamentals of advertising and corporate communication. Emphasizes integrated communication as a strategic management function. Examines how organizations use new media channels and content to engage with stakeholders to achieve organizational objectives. Develops basic skills and processes to prepare multi-platform narratives, and research skills to gather and analyze information accurately and to communicate effectively about complex situations and events. Prerequisite: Admission to the SMAD major or permission of the instructor.

SMAD/KIN 243. Sport Communication Techniques: Broadcasting. 3 credits.
Study and practice of broadcast and A/V techniques applied in a variety of sport settings. Prerequisite: KIN 242.

SMAD/KIN 244. Sport Communication Techniques: Writing and Reporting. 3 credits.
Basic skills of sport writing and reporting are studied and applied. Students gain experience in a variety of sports and learn and apply skills in researching, interviewing, reporting, writing columns and features involving the world of sports. Prerequisite: KIN 242.

SMAD 250. Scriptwriting. 3 credits.
The study of the principles and practices of writing scripts for commercial, non-commercial and corporate media applications. Emphasis on preparing dramatic and information forms for broadcast or recording. Fulfills the College of Arts and Letters writing-intensive requirement for the major. Prerequisites: Admission to the SMAD major; for non-majors: admission to the cross disciplinary minor in creative writing minor; or permission of instructor.

SMAD 251. Screenplay Writing. 3 credits.
Introductory study of the principles and practices of screenwriting. Emphasis is placed on the basic narrative structures underlying cinematic story-telling and the development of a short film script. Fulfills the College of Arts and Letters writing-intensive requirement for the major. Prerequisites: Admission to the SMAD major; for non-majors: admission to the cross disciplinary minor in creative writing minor; or permission of the instructor.

SMAD 256. Principles of Advertising. 3 credits.
Study of the principles and practices of advertising, including the process, planning, production and placement of commercial messages. Students will learn of the social impact, creative strategy, consumer use, message production and media placement strategies of advertising. Students get practical experience applying an integrated communication strategy. Prerequisite: SMAD 202 or permission of the instructor.

SMAD 295. Practicum in Media Arts and Design. 1 credit, repeatable to 3 credits.
First year students and sophomores participating in co-curricular media activities may receive one hour of credit for fieldwork at The Breeze, WMRA-FM, the Madison Video Productions or other university-related media outlets. Students are limited to one practicum per semester. Application procedures will be available from the school prior to registration. Prerequisite: Permission of the instructor.

SMAD 301. The Media Arts: Culture by Design. 3 credits.
Study of how mediated communication molds perception and influences cultural change. Emphasis on how language and imagery, sound and music are combined in current media to create meaning. Consideration of emerging media and their implications for cultural design. Prerequisites: SMAD 201 and SMAD 202 or permission of the instructor.

SMAD 302. Video Production. 3 credits.
Principles and practices of video production and editing. Focus on production planning, visual composition, lighting, recording sound and sequencing of shots. Emphasis on single camera videography, and editing for broadcast, non-broadcast and multimedia applications. Prerequisites: SMAD 201 and SMAD 202 or permission of the instructor.

SMAD 303. Post Production. 3 credits.
Principles and practices of video editing. Focus on the techniques, aesthetics, and strategies of editing video. Emphasis on technical standards of ingest, storage, non-linear editing, multi-layer compositing, and transcoding required for effective program output and multi-format distribution. Prerequisite: SMAD 302 or permission of the instructor.

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SMAD 304. Audio Production. 3 credits.
Study of digital sound production and digital sound-for-picture production. Emphasis on advanced theories and applications. Prerequisite: SMAD 302; prerequisite or corequisite: SMAD 303 or permission of the instructor.

SMAD 305. Special Topics in Media Production. 3 credits, repeatable to 6 credits.
The study of current topics and issues in media arts and design. Emphasis on contemporary themes of immediate concern. Prerequisite: Admission to the SMAD major or permission of the instructor.

SMAD 306. Studio Production. 3 credits.
The study of principles and practices of multi-camera studio production. Focus on visual composition, audio, lighting and communication in a studio environment. Emphasis on technical and aesthetic demands of multi-camera studio production. Prerequisite: SMAD 302 or SMAD 309 or permission of the instructor.

SMAD 307. Interactive Design for the Web I. 3 credits.
Principles and practices of video production and editing. Focus on production planning, visual composition, lighting, recording sound and sequencing of shots. Emphasis on single camera videography, and editing for broadcast, non-broadcast, and multimedia applications. Prerequisites: SMAD 201 and SMAD 202 or permission of the instructor.

SMAD 308. Interactive Design for the Web II. 3 credits.
Study of the principles and practices of creating effective interactive media. Emphasis on user-centered design of the interactive experience. Includes animation and scripting for online and fixed media. Prerequisite: SMAD 307 or permission of the instructor.

SMAD 309. Video Journalism. 3 credits.
Study of principles and practices in electronic journalism including information gathering, news writing, camera operations and editing techniques. Emphasis on the use of video and audio to produce hard news, feature news and long-form perspective-based stories for broadcast and online. Examination of the Internet’s impact and the differences between traditional and online media outlets in constructing stories with video and sound. Prerequisites: SMAD 202 and prerequisite or corequisite of SMAD 210, or permission of the instructor.

SMAD 310. Advanced Reporting and Writing. 3 credits.
Study and practice of in-depth or specialized reporting roles and techniques, story genres, advanced writing methods and pursuing publication. Reading exemplary writers. Group and instructor critiques. Prerequisite: SMAD 210 or permission of the instructor.

SMAD 311. Feature Writing. 3 credits.
The study and practice of conceiving, reporting, and writing human-interest stories. Use of advanced storytelling methods and pursuing publication. Reading exemplary writers. Group and instructor critiques. Prerequisites: SMAD 201 and SMAD 342; for non-majors: admission to the cross disciplinary minor in creative writing minor and SMAD 210 or SMAD 342; or permission of instructor.

SMAD 321. Feature Magazine Production. 3 credits.
A practical course in which students produce a feature magazine published regularly by the journalism area. Each student is assigned a specific staff position. Students learn to use the latest computer pagination technology in the design and production of a magazine. Prerequisite: SMAD 310 or SMAD 311; or permission of the instructor.

SMAD 322. Multimedia Journalism. 3 credits.
Advanced study of the knowledge and skills required to produce new media journalism. Focus on new and emerging media forms including blogs, social media and journalism websites. Consideration of audiences, story generation, writing, editing, site design and management. Prerequisites: SMAD 201 and SMAD 309. Integrated Advertising and Corporate Concentrators: SMAD 225 and SMAD 342; or permission of the instructor.

SMAD 330. New Media Law. 3 credits.
An in-depth investigation of business and legal aspects of new media production, publication and distribution. Examination of legal issues affecting the new media industry including: intellectual property laws, torts, contracts, and licensing. Discussion of current policies and practices affecting new media development and review of pertinent legal reference materials. Prerequisites: SMAD 301 or SMAD 301L; and junior or senior standing or permission of the instructor.

SMAD 332. Print Communication Design. 3 credits.
An introduction to the theories and methods of design for print communication. Students learn various techniques needed to produce the design materials that go into print publications. Prerequisite: SMAD 201 or permission of the instructor.

SMAD/JUST 334. Media and Justice. 3 credits.
This course will examine media constructions of justice. Students will be required to critically analyze the portrayal of justice issues in various media forms including television, internet, and film. Attention will be given to the accuracy of such portrayals and whether they have any broader social implications in regards to how we view complex justice issues. Prerequisite: Admission to the SMAD major.

SMAD 340. Advanced Screen Writing. 3 credits.
Advanced study of the principles of screenplay writing for feature films and television movies. Emphasis is placed on the structure of narrative film. Prerequisites: SMAD 251; for non-majors: admission to the cross disciplinary minor in creative writing minor and SMAD 251; or permission of the instructor.

SMAD 341. Information and Communication Technologies. 3 credits.
Study of current communication and information technologies utilized in corporate communication. An emphasis on research and analysis of current technology trends and applications, as well as message design and implementation of new media technologies. Focus on effective and efficient use of new social media for information distribution to internal and external corporate constituent groups. Prerequisites: Converged Media concentrators: SMAD 202 and SMAD 231; Corporate Communication concentrators: SMAD 202 and SMAD 241; or permission of the instructor.

SMAD 342. Creativity in Advertising and Corporate Communication. 3 credits.
Introduces students to the fundamentals of message design and content production for traditional and new media in advertising and corporate communications. Emphasizes the basic skills of audience research and analysis, strategic planning, writing, reporting, editing, and designing and producing materials in various media (e.g., print, broadcast, online, and social media). Reviews the ethical and legal issues involving the creative process. Prerequisite: SMAD 242.

SMAD 356. Telecommunication Policy and Regulation. 3 credits.
An overview of the regulatory issues encountered in the telecommunications industry. Emphasizes post 1982-FCC changes deregulating telephonic, CATV and broadcast industries. Includes regulation of emerging services and technologies, First Amendment issues, ownership and distribution of new information forms, and licitations and uses of technology. Prerequisite: Junior or senior standing or permission of the instructor.

SMAD/JUST 334. Media and Justice. 3 credits.
Study of the history of the media in relation to American politics and society. Emphasis on key periods in the development of journalism and the mass media and the role of the journalist in society. Prerequisites: Admission to the SMAD major and junior or senior standing; or permission of the instructor.

SMAD 371. Narrative Media Studies. 3 credits.
Study of narrative theories that focus on the forms and effects of storytelling in cinema and television. Emphasis on how such theories explain the cultural impact and personal utility of narrative contents in everyday life. Consideration of “the hero’s journey” in a variety of film genres and TV formats. Prerequisites: SMAD 301 or SMAD 301L and junior or senior standing; for non-majors: admission to the cross disciplinary minor in film studies; or permission of the instructor.

SMAD 372. Media History. 3 credits.
The study of the history of the media in relation to American politics and society. Emphasis on key periods in the development of journalism and the mass media and the role of the journalist in society. Prerequisites: Admission to the SMAD major and junior or senior standing; or permission of the instructor.

SMAD 373. Media Analysis and Criticism. 3 credits.
The study and practice of journalistic and scholarly criticism of the mass media. Emphasis on interpretive writing about television, film and popular music. Consideration of contemporary analytical methods for researching mass-mediated culture. Prerequisites: SMAD 301 or SMAD 301L; for non-majors: junior or senior standing and admission to the cross disciplinary minor in creative writing; or permission of the instructor.

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SMAD 380/ENG 380. Introduction to Film. 3 credits.
An introduction to the study of film as an aesthetic practice, including formal and industrial aspects of film analysis, theoretical approaches to film and writing and research methodologies of film and media studies. Prerequisites: SMAD 301 or SMAD 301L and junior or senior standing, for non-majors: Admission to the cross disciplinary minor in film studies and junior or senior standing; or permission of the instructor.

SMAD 390. Directed Projects in Media Arts and Design. 2 credits, repeatable to 4 credits.
Supervised projects related to the study of any of the communication media. Credit given for original individual or group projects beyond the school’s usual co-curricular activities. A suitable completed project or report is required before credit can be awarded. Prerequisite: Permission of the instructor.

SMAD 395. Advanced Practicum in Media Arts and Design. 1 credit, repeatable to 3 credits.
Juniors and seniors participating in co-curricular media activities may receive one hour of credit for fieldwork at The Breeze, Curio, WMRA-FM, the Madison Video Productions or other university-related media outlets. Students are limited to one practicum per semester. Application procedures will be available from the school prior to registration. Prerequisite: Permission of the instructor.

SMAD 398. Critical Studies in Media Arts and Design. 3 credits, repeatable to 6 credits.
Supervised study of film and television, interactive media and their contents. Emphasis on the analysis of emerging issues in content production, reception and media effects. Focus on the critical methods used to examine such issues. Consideration of how particular methods may be applied in international and foreign contexts. Focus on the analysis of emerging issues in content production, reception and media effects. Focus on the critical methods used to examine such issues. Consideration of how particular methods may be applied in international and foreign contexts. Prerequisites: SMAD 301 or SMAD 301L; for non-majors: Admission to the cross disciplinary minor in film studies and junior or senior standing, for non-majors: Admission to the cross disciplinary minor in film studies and junior or senior standing; or permission of the instructor.

SMAD 400. Senior Assessment in Media Arts and Design. 0 credits.
Students participate in testing, interviews, project reviews and other assessment activities as approved by the School of Media Arts and Design. Grades will be assigned on a credit/no-credit basis. Prerequisites: SMAD 301 or SMAD 301L and senior standing or permission of the school director.

SMAD 402. Motion Graphic Design and Production. 3 credits.
Study of the principles of motion design. Focuses on integrating media (video, greenscreen, photos, vector art, type) within compositing software to tell a story, convey a complex concept or artistically present an idea. Emphasis on graphic design and motion theory, typography for video, logo animation, and show package design. Prerequisite: SMAD 303 or permission of the instructor.

SMAD 403. Documentary Production. 3 credits.
This course explores the key components of documentary filmmaking and production. The course will introduce students to a professional level of documentary filmmaking, and will focus on enhancing non-fiction storytelling skills. The course will explore funding, festival and outreach strategies. Prerequisite: SMAD 302 or SMAD 309.

SMAD 404. Advanced Interactive Design. 3 credits.
Study of advanced techniques in interactive media for online and fixed media delivery. Emphasis on emerging technologies and professional development strategies. Includes creation of an interactive portfolio. Prerequisite: SMAD 308 or permission of the instructor.

SMAD 405. Producing and Directing. 3 credits.
Study of the principles and practices of producing and directing programs for video and cinema. Emphasis on the producer’s and director’s contribution to creative development and production. Focus on the director’s responsibilities, including directing talent, visualization, production, and project management. Additional focus on the producer’s responsibilities, including creative development, production management, financial management, promotion, and distribution. Prerequisites: SMAD 302 and senior standing or permission of the instructor.

SMAD 407. Business and Management of Digital Media. 3 credits.
Study of the principles and practices of managing digital media production. Emphasis on financial and personnel management, client relationships, and the structures and practices of digital media industries. Consideration of new trends in production and distribution. Attention to career preparation and development. Prerequisites: Senior standing and SMAD 302 or SMAD 307, or permission of the instructor.

SMAD 408. Converged Media Lab. 3 credits.
Advanced study in converged media production. A senior production studio class focusing on creative solutions for complex communication problems in print, video and web media. The client-based projects will require creative brainstorming, teamwork, project management, and analysis and criticism in addition to production and distribution. Additional attention to portfolio development. Prerequisites: SMAD 231, SMAD 307 and one of the following: SMAD 302, SMAD 305, SMAD 308 or SMAD 332; and senior standing or permission of the instructor.

SMAD 409. Electronic News Producing and Editing. 3 credits.
Study of the processes and responsibilities of producing news for electronic distribution. Students will research, write and produce stories for distribution over-the-air, on cable and over the Internet. Emphasis on legal and ethical issues in news coverage. Prerequisites: SMAD 309 or permission of the instructor.

SMAD 410. The Creative Producer. 3 credits.
Study of the principles and practices of producing for television. Emphasis on programming (entertainment news to late-night talk, sketch comedy, reality TV, drama and sitcom), and the producing process (moving a project from idea to completion). Focus on budget management and all phases of production management. Consideration of industry practices to help prepare students to enter the entertainment industry. Prerequisite: Acceptance into the JMU in LA program.

SMAD 441. Corporate Communication Management. 3 credits.
Study of principles and practices of managing corporate communication. Emphasis on evaluation and management of messages, channels and communication objectives. Attention given to critical analysis and strategic planning. Focus on legal, ethical, financial, personnel issues and career development. Analysis of case studies and current issues. Prerequisites: Senior standing, SMAD 241 and SMAD 341; or permission of the instructor.

SMAD 442. Functions of Corporate Communication. 3 credits.
Examines how corporate communication functions (internal communication; investor, government, and media relations; corporate responsibilities; and crisis communication) are integrated in organizational objectives. Emphasizes strategic planning, message design and production, implementation/evaluation of new media technologies, research and current trends. Reviews responsibilities, duties, and legal/ethical standards in corporate communication issues. Prerequisite: SMAD 342.

SMAD 443. Producing Creative Advertising. 3 credits.
Production of creative advertising and effective selling messages and “big ideas” through traditional and new media to reach the appropriate target profile in the marketplace. Emphasizes the creative process (copywriting and design layout). Integrates the creative elements of advertising into a comprehensive advertising campaign project with advertising deliverables. Reviews legal/ethical issues related to the creative process. Prerequisite: SMAD 342.

SMAD 460. Film and Society. 3 credits.
The study of the cultural impact of the film industry as an institution of mass communication. Emphasis on the interrelationship among social, economic and technological factors influencing the creation and consumption of motion pictures. Consideration of particular films as indicators of cultural change. Prerequisites: SMAD 301 or SMAD 301L and junior or senior standing; for non-majors: admission to the cross disciplinary minor in film studies and junior or senior standing; or permission of the instructor.

SMAD 461. Film as Art. 3 credits.
Advanced study of how movies tell their stories in visual terms. Emphasis on the historical evolution and design of the moving image. Consideration of the latest imaging technologies affecting film narrative. Prerequisites: SMAD 301 or SMAD 301L and junior or senior standing; for non-majors: admission to the cross disciplinary minor in film studies and junior or senior standing; or permission of the instructor.

SMAD 462. Documentary in Film and Television. 3 credits.
The study of content, style, technique and effect of representative samples of the documentary form. Consideration given to informational and persuasive elements. Prerequisites: SMAD 301 or SMAD 301L and junior or senior standing; for non-majors: admission to the cross disciplinary minor in film studies and junior or senior standing; or permission of the instructor.

SMAD 463. Film Adaptations. 3 credits.
The study of the process of adapting literature into feature films. Consideration is given to the original literary work, as well as to the changes undergone in its adaptation to film. Prerequisites: SMAD 301 or SMAD 301L and junior or senior standing; for non-majors: junior or senior standing and admission to the cross disciplinary minor in creative writing; or junior or senior standing and admission to the cross disciplinary minor in film studies; or permission of the instructor.
SMAD 464. Contemporary American Film. 3 credits.
Study and analysis of modern American films of the past twenty years. Focus on storytelling technique, cinematic elements and thematic content. Films will be examined against the backdrop of their specific historical, political, and socio-cultural context. Prerequisites: SMAD 301 or SMAD 301L and junior or senior standing; for non-majors: admission to the cross disciplinary minor in film studies or permission of the instructor.

SMAD 470. New Media and Society. 3 credits.
Study of the key issues arising from the role of information and information technology in organizations and society. Emphasis on the spheres of social life in which new media technologies play a role: politics, community, economics, culture, personal and global contexts. Focus on a wide range of perspectives and on both theoretical and empirical research to examine new media's role in social capital and community. Prerequisites: SMAD OR WRTC major; junior or senior standing; SMAD majors: SMAD 301 or 301L; or permission of the instructor.

SMAD 471. Media Ethics. 3 credits.
Study and discussion of ethical principles and professional codes as applied to mass media production, covering journalism, advertising, public relations, and entertainment, in all media forms. Emphasis on case studies. Prerequisites: SMAD 301 or SMAD 301L and junior or senior standing; or permission of the instructor.

SMAD/SCOM/POSC 472. Media and Politics. 3 credits.
A study of the media's role in political campaigns, concentrating on past/present election, the media's role in covering political parties and coverage of the governing process. Discussion of electronic and print media. Topics to be examined include campaign videos, CSPAN, political ads, editorial cartoons, TV debates, convention coverage and radio talk show commentary.

SMAD 490. Special Studies in Media Arts and Design. 3 credits.
An independent study for students to pursue individual research under the guidance of a faculty adviser. Prerequisites: Senior SMAD majors in good standing and permission of the instructor.

SMAD 495. Internship in Media Arts and Design. 1-2 credits, repeatable to 4 credits.
An off-campus program prepared and monitored on an individual student basis. Internships are designed to provide practical experience in converged and interactive media, corporate communication, digital video and cinema, and journalism. Prerequisites: Permission of the school director and the media facility involved. Students must meet criteria and application procedures established in each concentration.

SMAD 497. Advanced Projects in Media Arts and Design. 3 credits.
This advanced course will enable students to collaborate to create diverse media projects. Projects may be designed to focus on one or many concentrations, and are intended to provide a culminating media creation experience. Prerequisites: SMAD major and junior or senior standing.

SMAD 498. Senior Seminar in Media Arts and Design. 3 credits.
The study and research of the history and philosophy of the function of mass communication in society. Consideration of topics relating to problems of communication systems, technological freedoms, and press freedom and responsibilities. Prerequisites: SMAD 301 or SMAD 301L and senior standing; or permission of the instructor.

SMAD 499. Honors in Media Arts and Design. 6 credits.
Year course.

Middle and Secondary Education

MSSE 101. Orientation to the Profession. 2 credits.
Provides information about preparation programs and careers for teachers of middle and high schools. Students participate in reflective activities for making personal and professional decisions about teaching and also engage in a service learning project.

MSSE 240. Foundations of General Education Grades 6-12. 3 credits.
This course is designed to provide an overview of the philosophy and curriculum of the secondary (6-12) general education classroom. Students will learn assessment requirements of general secondary classrooms and the parameters under which teachers in general secondary schools must function. This course is not open to middle and secondary education teacher licensure candidates.

MSSE 370. General Instructional Methods for Grades 6-12. 3 credits.
This general teaching methods course provides a solid foundation for planning curriculum and instruction for middle and high school students. Topics include engaging adolescent learners, lesson design instructional strategies and assessment models. Corequisites: For secondary education: MSSE 371 & EDUC 310; for middle education, MSSE 371. Prerequisites: Admission to teacher education and PSYC 160 for secondary education students; Admission to teacher education, EDUC 310, MIED 311 and READ 312 for middle education students.

MSSE 371. Clinical Experience in Adolescent Education. 2 credits.
Students will devote 20 hours to instruction and clinical experiences. Instruction focuses upon diverse challenges faced by adolescent learners, as well as training in skills related to lesson delivery. Clinical experiences include observation in the field, reflection, and multiple opportunities in small groups to practice the art of teaching with peer and instructor feedback. Satisfactory performance in this course is required for retention in teacher education. Prerequisites: PSYC 160 for secondary education students; EDUC 310, MIED 311 and READ 312 for middle education students. Corequisites: For secondary education: MSSE 370 and EDUC 310, for middle education, MSSE 370.

MSSE 470(E, H, M and S). Teaching Methods Courses. 3 credits.
Specific techniques and methods for middle and secondary teachers in their respective discipline areas. Competencies to be developed will include discipline-specific planning strategies, instructional models, assessment of student learning, etc. Corequisites: MSSE 471. Prerequisites: EDUC 310, MIED 311, MSSE 370, MSSE 371 and READ 312 for middle education students; EDUC 310, MSSE 370 and MSSE 371 for secondary education students.

MSSE 470E. English/Language Arts Teaching Methods for Middle School. 3 credits.
Specific instructional and assessment techniques and methods targeted for the middle school learner for middle and secondary teachers in their respective discipline areas. Competencies to be developed will include discipline-specific planning strategies, instructional models, assessment of student learning, etc. Corequisites: MSSE 471. Prerequisites: EDUC 310, MIED 311, MSSE 370, MSSE 371 and READ 312 for middle education students; EDUC 310, MSSE 370 and MSSE 371 for secondary education students.

MSSE 470H. Social Studies Teaching Methods, Grades 6-8. 3 credits.
Specific instructional and assessment techniques and methods targeted for the middle school learner for middle and secondary teachers in their respective discipline areas. Competencies to be developed will include discipline-specific planning strategies, instructional models, assessment of student learning, etc. Corequisites: MSSE 471. Prerequisites: EDUC 310, MIED 311, MSSE 370, MSSE 371 and READ 312 for middle education students; EDUC 310, MSSE 370 and MSSE 371 for secondary education students.

MSSE 470M. Mathematics Teaching Methods, Grades 6-8. 3 credits.
Specific instructional and assessment techniques and methods targeted for the middle school learner for middle and secondary teachers in their respective discipline areas. Competencies to be developed will include discipline-specific planning strategies, instructional models, assessment of student learning, etc. Corequisites: MSSE 471. Prerequisites: EDUC 310, MIED 311, MSSE 370, MSSE 371 and READ 312 for middle education students; EDUC 310, MSSE 370 and MSSE 371 for secondary education students.

MSSE 470S. Natural Sciences Teaching Methods, Grades 6-8. 3 credits.
Specific instructional and assessment techniques and methods targeted for the middle school learner for middle and secondary teachers in their respective discipline areas. Competencies to be developed will include discipline-specific planning strategies, instructional models, assessment of student learning, etc. Corequisites: MSSE 471. Prerequisites: EDUC 310, MIED 311, MSSE 370, MSSE 371 and READ 312 for middle education students; EDUC 310, MSSE 370 and MSSE 371 for secondary education students.

MSSE 471. Content Area Field Experience in Middle Schools. 3 credits.
Provides practical classroom experience for teacher education candidates in the middle and secondary education programs under the supervision of an in-service teacher and a clinical professor. Students engage in classroom activities that provide an opportunity for them to practice the strategies and concepts learned in the methods courses. Corequisites: MSSE 470 and READ 472 or EXED 460 for middle education students; MSSE 470 and READ 440 for secondary education students. Prerequisites: EDUC 310, MIED 311, MSSE 370, MSSE 371 and READ 312 for middle education students; EDUC 310, MSSE 370 and MSSE 371 for secondary education students.

MSSE 471E. Field Experience in Middle School English. 3 credits.

MSSE 471H. Field Experience in Middle School Social Studies. 3 credits.

MSSE 471M. Field Experience in Middle School Mathematics. 3 credits.

MSSE 471S. Field Experience in Middle School Natural Science. 3 credits.