COMMUNICATIONS (COMM)

COMM 501: Proseminar in Mass Communications
3 Credits/Maximum of 3
Overview of paradigms in mass communications research

Prerequisite: admission to doctoral program

COMM 502: Pedagogy in Communications
3 Credits
The purpose of this seminar is to train doctoral students to teach in the communications discipline at the college/university level. COMM 502 Pedagogy in Communications (3)This seminar is proposed as a dimension of the emphases on TA training and teacher preparation for doctoral students in Mass Communications in the College of Communications. The course is one aspect of the College's Graduate Teaching Academy. The seminar provides a foundation in pedagogical research, theory and classroom practice for mass communications doctoral students. The Graduate Teaching Academy demonstrates our faculty's commitment to the integration of training in research and teaching. The work of the seminar focuses on the unique characteristics of undergraduate and graduate education in the communications discipline. The principles and practices covered in the seminar have applications for teaching communications in a number of venues including the academic, business and government professional settings. The course involves students in collaborative learning, assessment skills, powerful pedagogies, practical workshops and substantive reviews and applications of curricular and pedagogical research in the communications discipline. The Graduate Teaching Academy in the College of Communications involves students in a number of activities that will prepare them for teaching. This seminar is one of those activities. Graduate Teaching Academy participants: 1. Take coursework in communications curriculum and pedagogical development that stresses a teaching scholarship of learning theory and a pedagogy of active and engaged learning practices. 2. Study the scholarship of learning within a disciplinary context in order to understand the system of organized knowledge in the communications discipline within which our teaching takes place. This orientation encourages a critical review of the comparative costs/benefits of a disciplinary - versus interdisciplinarity-based communications pedagogy. 3. Eligible doctoral students become Teaching Associates, under faculty supervision, for selected College of Communications courses 4. Teach an undergraduate course in the College as an instructor. 5. Develop a teaching portfolio. 6. Attend College colloquia.7. Have access to College resources like the Academic Services Center, the Office of Multicultural Affairs, and University resources such as the Center for Excellence in Learning and Teaching at Penn State's Schreyer Institute.8. Complete the Teaching with Technology certification.

COMM 504: Seminar in the History of Mass Communication
3 Credits
No description.

COMM 505: International Communication Problems
3 Credits
Legal and communications problems of the international flow of news and opinion; international press codes.

COMM 506: Research Methods in Communications
3 Credits
The scientific method; survey of basic concepts of theoretical and empirical research; variety of methodology; criteria for adequate research. COMM 506 Introduction to Mass Communications Research (3) COMM 506 provides an overview of and foundation in research. Students are exposed to the nature of scientific inquiry, the process of concept explication, operationalization, measurement, and sampling. They also learn how to ask a research question. Research ethics, the logic and mechanics of experimental methods, fundamentals of survey design, and content analysis are also discussed. Students demonstrate the concepts learned in class by completing their own research project. Students also are exposed to statistical logic and practice in the context of their own project.

COMM 507: News Media and Public Opinion
3 Credits
Problems in the function, techniques, and responsibilities of press, radio, and television in forming and interpreting opinion.

COMM 508: The Literature of Journalism
3 Credits
No description.

COMM 510: Comparative Theories of Press Systems
3 Credits
Institutional structure and normative functions of press systems in modern societies, as shaped by prevailing world view and social organization.

COMM 511: Mass Communications Research Methods II
3 Credits
Problems of bibliographical research; evaluation of sources and materials in mass communications history, biography, structure, ethics, and other areas.

Prerequisite: COMM 506

COMM 512: Government and Mass Communications
3 Credits
Problems of freedom of information; governmental efforts to control mass communication agencies; government news coverage; public information agencies.
COMM 513: Constitutional Problems of the News Media  
3 Credits  
Problems involving conflict between guarantees of press freedom in the First and Fourteenth Amendments and rights and privileges of others.  

COMM 514: Political Economy of Communications  
3 Credits  
Structure and functions of United States and global media systems and their relationship to political and economic systems.  

COMM 515: MA Proseminar in Mass Communications  
3 Credits  
An introduction to graduate studies for MA students in Media Studies and Telecommunications Studies.  

**Prerequisite:** COMM 506 or permission of program  

COMM 516: Introduction to Data Analysis in Communications  
3 Credits  
To understand and be able to use data analysis techniques common to research in communications. COMM 516 Introduction to Data Analysis in Communications (3) This class serves as an introduction to data analysis techniques commonly employed in the field of communications and in related disciplines. The course will employ a commonly-used statistical package to illustrate concepts (e.g., Statistical Package for the Social Sciences, SPSS), and instruction will be provided on how to employ statistical software to conduct a variety of specific analysis techniques. These techniques will include descriptive statistics, analysis of variance, correlation and regression, and exploratory factor analysis. Examples of research from the communications discipline and related fields will be used throughout the semester to illustrate concepts. Emphasis will be placed on decisions involved in the data analyses process, interpretation of data, and effective presentation of results in journal-article format. Evaluation will be based on short take-home assignments, exams, and a final paper.  

**Prerequisite:** COMM 506 or consent of program  

COMM 517: Psychological Aspects of Communication Technology  
3 Credits  
Investigation of psychological aspects of human-computer interaction (HCI) and computer-mediated communication (CMC). COMM 517 Psychological Aspects of Communication (3) This graduate seminar is devoted to the investigation of psychological aspects of human-computer interaction (HCI) and computer-mediated communication (CMC). Theories and empirical research from communication, psychology, and human-computer studies will be used to explore social responses to communication technologies; uses and effects of unique technological features such as interactivity and navigability upon individual users’ thoughts, emotions, and behaviors; nature and dynamics of interpersonal and group interaction when mediated by technology; how issues of “source” and “self” are altered by computer-based media; and psychological consequences of internet use, such as addiction and depression. A primary goal of the seminar is to draw out, through readings, discussion and empirical exploration, fundamental theoretical and practical implications of these lines of research for interface design, psychological processing of mediated form and content, human-web site interaction, and internet-based mass, group and interpersonal communication.  

**Prerequisite:** COMM 304 or COMM 506  

COMM 518: Media Effects  
3 Credits  
Advanced study of the effects of media messages and technologies via theories and empirical evidence pertaining to processes of effects.  

**Prerequisite:** COMM 506 or permission of instructor  

COMM 520: Seminar in Advertising Problems  
3 Credits  
No description.  

COMM 521: Advertising Perspectives  
3 Credits  
An overview of advertising in industrial societies including institutional issues; socio-demographic issues; public policy issues; and ethical issues.  

COMM 522: Social and Cultural Aspects of Advertising  
3 Credits  
Analysis of advertising from a cultural/literary perspective; emphasis on semiotic and hermeneutic analysis; advertising as social communication.  

COMM 530: Research Methods in Strategic Communications  
3 Credits  
The purpose of this course is to provide students with an understanding of the methods and practices used to conduct effective research in examining practical and theoretical questions in strategic communications. Successful strategic communications campaigns are informed by research conducted before (planning), during (monitoring), and after (evaluation) the implementation of the campaign. Further, research based on theoretical models can help understand and explain the effects of strategic communications on consumers, individuals, and society. This course will be organized so that students will (1) gain exposure to a breadth of methods used by industry and academic researchers; (2) understand the role of theory in informing strategic communications research and its applications; (3) gain depth and experience in several research methods and techniques; and (4) conduct research and obtain research-writing experience, in either academic or professional venues. Students also will learn how to use databases employed by strategic communications researchers to conduct audience/consumer analysis and media research. A range of specific research methods will be discussed, with emphasis placed on trends or contemporary developments in research. In addition to examining the principles, methods, and techniques of strategic communications research, the course will address issues such as when research should or should not be conducted, analyzing data sets, forming meaningful research questions, determining the proper means to answer the questions, and presenting the results and solutions in a clear and compelling manner.
COMM 531: Strategic Communications: Theory and Implementation

3 Credits

This course provides students with a comprehensive understanding of professional strategic communications via examining key theoretical and conceptual fundamentals of persuasive communication, attitude formation and change, and mass communication, while examining applied implications that affect the strategic communications industry. Students in this course will be: 1) exposed to academic research that analyzes and explains how and why the implementation of strategic communication works, and 2) shown how this information can be tested, extended, and applied to goal-oriented communication campaigns. Through comprehending both the theoretical underpinnings of strategic communications practices and their proper application, students will gain valuable knowledge that applies to both scholarly pursuits -- which help to develop theory and knowledge -- and professional pursuits, in which theoretical advancements can provide real-world solutions. Strategic communications professionals need to comprehend a wide range of theoretical frameworks to understand how theory and research can inform the implementation of communications plans and decision-making. Students in this course will gain knowledge in traditional and contemporary academic research that examines the mechanisms of persuasive and mass communication in affecting consumers’ beliefs, attitudes, and behaviors. Students will examine the interplay of these theories and identify key gaps in the literature and/or untested potential relationships that could help better explain how strategic communications plans work or should work. Based on this insight, students will apply their theoretical knowledge to realistic industry situations and will be able to offer specific suggestions and communication strategies to solve actual problems. Students will learn how to extend the implementation, testing, and extension of relevant theory to guide the development and execution of communication plans. For each theory, students should be able to describe what other theories have mean to say about the same topic, and how this knowledge can be advanced and applied to achieve desired, communication-based results for any entity.

COMM 550: Film Theory and Criticism

3 Credits

Studies in traditional and contemporary film theory and criticism. COMM 550 Film Theory and Criticism (3) COMM 550 seeks to introduce students to a variety of theoretical approaches to the critical analysis of film. The course devotes attention to aesthetic as well as social, cultural, political and economic issues, assuming that they are, in fact, inseparable. It involves viewing films closely, and researching the contexts of their production and reception. It stresses critical thinking, reading, viewing and writing skills. COMM 550 assumes that films can reveal, both directly and indirectly, something about the experiences, identity, and culture of the people who produce and consume them. That is, movies can be analyzed--even psychoanalyzed--to reveal something about the cultural conditions that produced them and attracted audiences to them. The course seeks both to familiarize students with works they probably haven't seen, and to “defamiliarize,” through critical and historical analysis, works they very well may have seen. Films are examined as formal constructs, market commodities, and cultural artifacts. Individual instructors may emphasize film authorship, styles, genres, systems or cycles. They may focus on the context, text or reception of a film, filmmaker, or group of films. The emphasis of COMM 550 is always on the self-conscious, theoretically informed analysis of cinematic texts.

COMM 553: Special Problems in Film and TV

1-3 Credits/Maximum of 99

No description.

COMM 555: Media and Culture

3 Credits

An overview and history of critical theories that aim to explain the relationship between media and culture. COMM 555 Media and Culture (3) This course will provide an overview of the major theorists of mass media whose work offers critical appraisals of the impact of mass media on cultures and the people within those cultures. It will give students an understanding of the major theorists and their conceptions of the relationship between media, communication and culture. Each section is designed to interrogate a particular epistemological or methodological challenge to the social and cultural understanding of mass media, from the seminal thinking of the Frankfurt School - the first thinkers to engage this important field of research - through the theorists of the so-called post-modern turn. Special attention will be paid to examining the ways in which mass media constructs ideological foundations for society's understanding of democracy, identity and everyday life.

COMM 556: Reading Film

3 Credits/Maximum of 12

A practical and historical approach to film theory and analysis. This seminar develops critical visual literacy by examining a range of practices in cinema study, with emphases on the relation of film to literature and the analysis of film meaning. The course asks how to read a film, and considers the multiple ways that films combine framing, movement, editing, narrative, character, and genre toward the production of culture, ideology, identity, desire, poetic imagery, and community. Students will explore a wide range of critical methods, and will view one to two films per week. Readings will range from novels to classic film theory, cultural studies, belles-lettres, film criticism, radical politics, apparatus theory, media theory, and contemporary philosophy.

Cross-listed with: ENGL 556, VSTUD 556

COMM 580: Seminar in Telecommunications

3 Credits

Study of the historical and contemporary issues and problems in telecommunications.

COMM 582: Ethics and Emerging Communications Technology

3 Credits

Identification and analysis of ethical issues raised by electronic communications technologies.

COMM 584: International Telecommunications and Trade Policy

3 Credits

An interdisciplinary perspective that investigates contemporary debates and ongoing or anticipated conflicts in international telecommunications and trade policy. COMM 584 International Telecommunications and Trade
Policy (3) The study of international telecommunications policy requires an interdisciplinary perspective. Students should understand the past and present technological, business, philosophical, geopolitical and legal environment. Success in either the public or private sectors may depend on one's ability to anticipate and react to future trends and upheavals. The course presents, investigates and debates ongoing or anticipated conflicts in international telecommunications and trade policy. The resulting confrontations may stem from technological innovation, real or perceived changes in the marketplace, or the imperatives of prevailing regulatory, political or economic philosophies. Conflict resolution often results from persuasive advocacy, coalition building, and accommodation of outsiders with new perspectives or entrepreneurial visions, rather than applying legal precedent or treaty interpretations. The course also will examine how various nations have organized and reorganized the telecommunications sector. We will consider such developments as privatization, liberalization, deregulation and globalization. Faculty: Rob Frieden

COMM 585: Media & Telecommunications Industries

3 Credits

Study the structure and performance of media, telecommunications and information industries applying principles and ideas from microeconomics, finance and communications. COMM 585 COMM 585 Media & Telecommunications Industries (3) The objective of this graduate seminar is twofold. First, the course provides exposure to the applications of selected concepts, principles and topics in microeconomics to the analysis of the media, telecommunication and information markets. This course is not intended as a general introduction to microeconomic theory and practice - however, students will have the opportunity to begin their study of selected applications of microeconomic principles at a fundamental level and advance their understanding to a high level of complexity worthy of graduate coursework. The second objective of the course is to connect ideas and principles from microeconomics to a body of communications theories, demonstrating possible complements and conflicts across the two disciplines. Discussion of both theoretical and empirical scholarship is emphasized. This in turn gives students a framework for further research on the structure of information industries and the conduct and performance of communications firms. Course covers international markets but focus is on North America. Topics may include selected industries such as wired and wireless telephony, satellite communications, broadband/cable, broadcasting, film, advertising, publishing, computing and Internet; industrial organization; competition and competitive advantage, growth and the economic consequences of innovation; economics of intellectual property protection; electronic markets, hierarchies and transactions cost economics; the economic justification and effects of regulation; natural monopoly economics; cost modeling, demand forecasting and pricing in regulated monopoly and competitive industries; telecommunications deregulation and privatization.

COMM 587: Internet Law and Policy

3 Credits

Examination of legal, policy and business developments in Internet-mediated communications emphasizing the impact on existing regulatory and economic models. COMM 587 COMM 587 Internet Law and Policy (3) This course will provide a forum for students to investigate and debate ongoing or anticipated conflicts in Internet-mediated telecommunications, information processing and commerce. The resulting confrontations may stem from technological innovation, real or perceived changes in the marketplace, or the imperatives of prevailing regulatory, political or economic philosophies. Conflict resolution often results from persuasive advocacy, coalition building, and accommodation of outsiders with new perspectives or entrepreneurial visions, rather than applying legal precedent or treaty interpretations. Internet mediation has the potential to change how we communicate, educate, inform, entertain, and transact business. Technological and marketplace convergence means that Internet mediation will have a profound impact on many legal, regulatory and economic constructs, i.e., the pre-existing templates we use to describe and understand the communications process and impact on individuals and society. The course also will examine the growing body of cases that have addressed aspects of Internet-mediation in each of the following general categories: ♦ Speech - commercial and political speech, obscenity, forums analysis; ♦ Legal and Regulatory Consequences of Convergence - the juxtaposition of telecommunications and information processing technologies, markets and regulatory regimes; ♦ Governance and regulation of the Internet - whether the need exists for government intervention on such matters as numbering and domain name registration; ♦ Intellectual Property Rights - the impact of Internet-mediation on copyright, trademark and patent laws; ♦ Electronic Commerce - the law and policy of Internet-mediated transactions; privacy and encryption concerns; and ♦ Equity, Competition Policy and Consumer Protection Concerns what, if anything, should governments do to remedy market failures.

COMM 590: Colloquium

1-3 Credits/Maximum of 3

Continuing seminars which consist of a series of individual lectures by faculty, students, or outside speakers.

COMM 594: Research Topics

1-15 Credits/Maximum of 15

Supervised student activities on research projects identified on an individual or small-group basis.

COMM 595: Internship

1-18 Credits/Maximum of 18

Supervised off-campus, non-group instruction, including field experiences, practicums, or internships. Written and oral critique of activity required.

Full-Time Equivalent Course

COMM 596: Individual Studies

1-9 Credits/Maximum of 9

Creative projects, including nonthesis research, which are supervised on an individual basis and which fall outside the scope of formal courses.

COMM 597: Special Topics

1-9 Credits/Maximum of 9

Formal courses given on a topical or special interest subject which may be offered infrequently; several different topics may be taught in one year or term.
COMM 597B: **SPECIAL TOPICS**
3 Credits

COMM 600: Thesis Research
1-15 Credits/Maximum of 999
No description.

COMM 601: Ph.D. Dissertation Full-Time
0 Credits/Maximum of 999
No description.

COMM 602: Supervised Experience in College Teaching
1-3 Credits/Maximum of 3
Teaching or assisting in School of Communication courses by graduate students with previous news-editorial, advertising, and broadcasting experience.

COMM 610: Thesis Research Off Campus
1-15 Credits/Maximum of 999
No description.

COMM 611: Ph.D. Dissertation Part-Time
0 Credits/Maximum of 999
No description.

COMM 830: Strategic Communications Industry
3 Credits

Technology is transforming the strategic communications industry. COMM 830 provides students with an overview of the merging of the advertising, public relations, and corporate communications industries. Students will learn how digital technology has transformed paid, earned, and owned media. Students will explore the transformation of audiences from passive users to active and interactive media-savvy consumers. Special emphasis will include the global and ethical impacts of evolving strategic communication. Students will explore the industry structure as it has evolved from traditional media to the development of the digital media landscape from the internet, Web 2.0, and the post-PC era. The course also provides an overview of strategic communications as it applies to agency, firm, government, corporate, and nonprofit organizations. Students will gain an understanding of the analog and new media landscape and will develop an understanding of the economic and financial indicators that drive the present industry. The course will explore how traditional media practices are impacted by technology as well as the impact of technology on entrepreneurial opportunities for industry practices from broadcast and digital to print, advertising, journalism, and public relations. The course will examine the roles and characteristics of content providers, carriers, and the ever-changing traits and needs of digital media consumers with a focus on emerging technologies on the evolution of interactivity. The course will provide insight into content creation, management, networking, online communities, and content consumption, and the role of evaluation and metrics in understanding the digital landscape. In addition, the course will provide an overview of the social issues facing the digital industry and insights into best practices.

COMM 831: Digital Media Analytics I
3 Credits

This course provides an overview of the methods for collecting, analyzing, and utilizing audience data for digital media. The class will cover the fundamentals of traditional media audience measurement and web metrics, with an emphasis on "first-party" data. Students will learn the methods of data collection, analysis, and use for traditional broadcast media, and the transformation of these practices in the newly digitized and converged multiplatform, multiscreen environment. The course will also cover the basics of data capture for new media and the use of this data for the design of metrics appropriate for various purposes such as monitoring traffic, conversions, and revenue generation. The use of metrics in pricing models for advertising, sales generation, and content distribution will also be covered.

Prerequisite: COMM 530, COMM 830

COMM 832: Multimedia Content Development and Delivery
3 Credits

This course is designed to provide students with a background in the intellectual and practical skills involved with the development, execution, and delivery of strategic messages and content. Students will learn conceptual strategies that lead to the creative process and the resulting message executions that are delivered to targeted audiences on behalf of companies, brands, and organizations through numerous media formats. This course will explore how the role of branded content is evolving in the modern strategic communications landscape and how to apply different types of content generation to new and traditional communications channels. Students will evaluate the pros and cons of numerous modes of content delivery, and will learn the processes and tactics needed to create and implement numerous communication strategies across the major traditional and contemporary media platforms currently used in the industry. Students also will apply the necessary processes and steps to develop an effective multimedia content plan for any client.

Prerequisite: COMM 531 COMM 830

COMM 833: Ethics and Decision Making in Strategic Communications
3 Credits

This course provides a broad exploration of ethical topics in the practices of strategic communications, public relations and advertising. In particular, it investigates transparency, digital ethics, diversity, and mass-communication ethics as they apply to the development and application of communications strategy and content. Students will learn how ethical tenets are examined and incorporated into current theory and research within the fields of general ethical philosophy, public relations, corporate social responsibility, crisis communications, persuasion, and cultural-communication studies. By subsequently applying these principles to industry examples and professional codes of conduct, students will better understand the importance of ethical decision making in the field of strategic communications. Building on insights from the class, students will engage in online discussions and will apply topics learned in the class to identify and analyze contemporary ethical issues and problems affecting the strategic communications industry.

Prerequisite: COMM 830
COMM 834: Strategic Communications Campaigns

3 Credits

This capstone course requires students to apply the knowledge they have acquired in all the other foundation courses to develop a strategic communications campaign on behalf of a professional client. Students will conduct both primary and secondary research first, and then analyze the competitive environment surrounding the client’s service/brand. Based on the research, they will then design the messages, media, and other communication tools as part of a comprehensive communications campaign for the client.

Prerequisite: COMM 530, COMM 531, COMM 830, COMM 831, COMM 832, COMM 833

COMM 835: Social Media Communications

3 Credits

Social media is profoundly transforming human society in almost every aspect, in particular, communication and business. As social media has become an integral part of human life, it is crucial to understand the underlying mechanisms of social media before making best use of it. A profound knowledge of social media and how to use it productively is not only something “nice to know,” but a capability people must have to survive and excel in this new media age. This course focuses on two areas: 1) an in-depth understanding of the social media impact on strategic communications; and 2) how to make best use of social media tools. The impact of social media on cognition, knowledge collaboration, media industry, and strategic communications strategies will be covered. A solid knowledge of social media mechanisms serves as a foundation for making the best use of social media, no matter how current media evolves or what new media platforms emerge in the future.

Prerequisite: COMM 830

COMM 836: Strategic Communications Leadership

3 Credits

The rise of digital media and the public’s demand for transparency in business have elevated the importance of strategic communication. Long gone are the days where communicators were viewed as tacticians in organizations. Instead, today strategic communicators often hold top positions in companies. This course will provide students with the essential business knowledge they need to navigate as successful communicators. This will include a focus on the business essentials needed such as: terminology, reputation drivers, and leadership roles. It also builds awareness of key stakeholders such as investors, analysts, and communities. Building on these insights, students will be able to conduct communications audits for a company and understand how and why strong communicators are critical to successful companies.

Prerequisite: COMM 830

COMM 837: Reaching Multicultural Populations in Strategic Communications

3 Credits

There is an increased demand for professional communicators who understand how to reach culturally and ethnically specific market segments using strategic communications strategies. The focus of this course will be on how to effectively and strategically communicate with multicultural populations using mass communication to develop an inclusive environment where diversity is embraced, respected, and valued. The course will explore the economic, political, and social impact of culture and race in our society, socio-economic differences, trends within various multicultural communities and groups, and how traditional and new media communities are reaching these communities. The content of this course will be useful to understand the multicultural market segment. The goal of the course is to understand culture-based communication strategies and market research, multicultural communication research and theories, and apply this understanding to strategic communication decisions.

Prerequisite: COMM 830

COMM 838: Strategic Communications Law

3 Credits

This course provides a broad exploration of strategic communications law. In particular, it examines how the First Amendment applies to strategic communications, the basic tenets of advertising regulation, privacy issues including the collection and use of personal and geolocation information, intellectual property issues including the use of trademarks and copyrights, and the role of self-regulation in a global communications environment. Students will learn to recognize and anticipate key legal issues that they will face as strategic communications practitioners and how to find answers to relevant legal questions.

Prerequisite: COMM 830

COMM 839: Digital Media Analytics II

3 Credits

This course will prepare students to demonstrate their competency and ability to navigate the digital media ecosystem and to develop, implement, administer, and evaluate digital marketing campaigns. Toward this end, students will learn to match digital solutions to clients’ marketing objectives through critical analysis and understanding of the tools and processes of the industry. Students will differentiate between digital and traditional media by identifying the strengths and weaknesses of each and understanding how digital complements and extends traditional campaigns. Specifically, students will become familiar with the targeting advantages of digital as related to programmatic buying and re-marketing, as well as behavioral and contextual targeting. Digital advertising formats and platforms will be explored, and students will learn to differentiate between them and to evaluate which formats are best based on client needs and objectives. Digital ad format standards and creative guidelines will be reviewed. Technologies and tools specific to the industry will be summarized, including buy-side and sell-side ad servers, verification systems, and audience segmentation tools. Concepts of statistical analysis will be applied to digital analysis, specifically in the context of A/B testing. Students will apply statistical tests to establish confidence intervals when evaluating alternative marketing approaches and opportunities.

Prerequisite: COMM 530, COMM 830, COMM 831