КАЗАХСКИЙ НАЦИОНАЛЬНЫЙ УНИВЕРСИТЕТ ИМ. АЛЬ-ФАРАБИ

**Факультет журналистики**

**Кафедра печати и электронных СМИ**

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| **Согласовано**На заседанииФакультета журналистикиПротокол №\_\_\_ от «\_\_» \_\_\_\_\_\_\_ 2013 г.Декан\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | УтвержденоНа заседании Научно-методическогоСовета университетаПротокол №\_\_\_ от «\_\_» \_\_\_\_\_\_\_ 2013 гПервый проректор\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

УЧЕБНО-МЕТОДИЧЕСКИЙ КОМПЛЕКС ДИСЦИПЛИНЫ

NEW MEDIA

Специальность 5В050400 – ЖУРНАЛИСТИКА

Форма обучения дневная

**Алматы 2013 г.**

**Introduction**

**COURSE SYLLABUS**

**New Media**

*Department of Journalism | al-Farabi Kazakh National University*

*Spring Semester | Saturday, 9:215pm – 5:55pm | 228 aud.*

**Instructor: Golovchun Aleftina**

**Office**: 225

**E-mail:** al\_tina@inbox.ru

**Office Hours:** by appointment

New Media is based on electronics and computing (hardware, software and networks), so you will study these background topics during Midterm 1. In Midterm 2 you will further explore the technology behind modern convergent media systems, computer hardware and software, and digital compression methods.

As a project student will work in groups to produce a multimedia product to the specification of external clients in the Professional Practice module, where you will learn presentation and negotiation skills, project planning, finance and management. The compulsory final project allows you to use your knowledge and skills to tackle a real-life problem and produce a piece of practical work that will showcase your skills to employers.

**Course Objectives**

This course is designed to meet the challenges of the contemporary media industry for highly trained specialists who can uphold and operate the complicated equipment used in this fascinating, exciting and growing field. It is based on the technology of modern media and relates that technology to its application.

The course teaches the fundamentals of media representation, storage, communication, and processing by digital means, with an emphasis on audio, still images, and video media. It includes an introduction to sampling theory and various representation techniques. This is used to describe and explain a variety of real devices, formats, and standards.

**Learning Outcomes**

Upon completion of the course the student should be able to:

- explain how to convert from one sample rate to another, and be able to analyze the resulting distortion or information loss.

- describe the origin and development of modern media and how new technology creates new forms of communication and interaction;

- describe a variety of devices and techniques used for media storage, communication, and presentation.

- conduct a critical evaluation of the relationship between communication technology and society and how they interact.

- reflect on the relationship between media technology and the context it appears in.

- determine what issues and parameters are likely to be critical ones in the design and implementation of a digital multimedia system.

**COURSE MATERIALS**

**Hardware/Software**

-Students will be able to work with audio and video recording devices that can be checked out. Student may choose to use his own equipment as well. He will be asked to bring his own flash memory card to each class. He may also want to purchase headphones for audio and video editing. Several social media and editing programs might be used. Some of these are available in the labs and are not required for purchase, though student may find it useful to find free versions online. Please note that if you do use programs outside of the lab, they may not sync well with those in the lab. If you choose to work with programs other than those taught or assigned, please consult with me first.

**Readings**

There are not required textbooks for this course. All readings will be available through syllabus links or will be shared via e-mail. Please note that you will be responsible for staying up to date with all readings, including those shared by your classmates as part of our Deep Thoughts assignments.

**IMPORTANT NOTES**

This is a course follows a hospital model, which means we will be using most of the lab time to practice skills and produce products. Because time is short, you will need to work on many skills outside of class using the tutorials provided or through your own initiatives. We will review many of the basics for the technology we use, so you will find the tutorials and extra materials helpful.

We additionally will be working collaboratively for much of the semester. Please note that while your assignments and projects may often be the result of group work, your grade is your own.

**Open Lab**

Many of our projects will require extensive computer time in and out of our scheduled class time. While we will have some class periods devoted exclusively to lab time, you should plan on working outside of class as well. Lab access is available for all students enrolled in this class.

As you work, be sure to save and back up your work often. Do not save files to your desktop. You are responsible for ensuring you have saved your work.

**Equipment**

Cameras and other equipment are each student’s responsibility. Any expense for damage comes out of the student’s resources. You may use your own equipment as well.

**Feedback**

This class requires a critical eye from everyone, so you should expect some debate and critique amongst your fellow students. Please remember to keep it thoughtful and professional. There will be times when I ask you to consider the comments or work of your classmates. Respect is key here, just as it is anywhere else. On assignments, I will have feedback (and grades) back to as promptly as I can.

**Course Syllabus and Schedule**

As we go along during the semester, the course may take us in different directions. As such, I may change some assignments or deadlines. I will keep you informed of any changes.

**CLASS & UNIVERSITY POLICIES**

**Readings:** Readings for each class will be made available through Canvas or via e-mail at least one week before class. You are responsible for knowing them and will be expected to contribute to class discussions based on the readings.

**Attendance:** This is a high-paced class, so attendance is important. You have up to two (2) unexcused absences before your grade will be affected. For every unexcused or unapproved absence beyond that mark your final grade in this class will be reduced by five (5) points. If you must miss a class, it is your responsibility to make up any work for that day and to get the class notes from a classmate. Class material will not be repeated for students who do not attend.

**Due dates:** All assignments must be turned in on the day they are due. No exceptions will be made without proof of a university-approved activity or an emergency. Late projects assignments will be penalized one letter grade for each day they are late. Assignments turned in five days late or beyond will be recorded as a zero.

**Honesty:** Plagiarism, academic dishonesty or cheating of any sort will result in at least an E for the assignment, and possibly for the course, and may also include additional disciplinary action. If you are ever uncertain about any honesty policies, please consult the Student Handbook or visit with me.

**Original Materials:** In this class, we will gather, edit, produce, and share a variety of content. All materials included in your projects must be original materials gathered by you. You may ***not*** use materials found online, gathered from other classmates, or gathered by you for previous classes or from previous activities outside of our class. You may use open-source materials as long as it is properly cited.

**Accommodation:** The university recognizes that students’ core beliefs might make it difficult to fulfill some requirements of some courses or majors. Students must determine when course requirements conflict with their core beliefs.

**Communication policy:** This is an upper level course where we will work as colleagues in a collaborative environment. You should address each other with professionalism and respect. You may wish to collaborative via social media and/or e-mail. When e-mailing, please be sure to include the course number, a proper greeting, and a proper signature.

**Technology policy:** This class takes place in a computer lab. You are expected to use lab computers for class work during class time. Please do not use your phones during class unless they are included in an assignment.

**Registrar’s Note:** You may drop any class in the first week with no penalty. If you choose to drop this course, you are responsible for removing the course from your schedule. For drop/withdraw options after that, see the university handbook for official policies and dates.

**ADA Statement:** Students with physical, sensory, cognitive, systemic, learning or psychiatric disabilities that might in any way affect their performance in the course should inform the instructor early in the semester to discuss any arrangements or accommodations necessary.

**ASSESSMENT**

**Weekly Analysis Pieces. (25% of Grade).** Each week you will be expected to produce a 1-2 page analysis of the week’s readings. Specific instructions will be provided for each set of readings.

**Class Participation and Attendance. (25 % of Grade).** We will strive for class sessions that are engaging, active, and informative. Our format will combine discussion, in-class screenings and presentations, and analysis. Students are expected to arrive to class each week prepared to contribute their knowledge and insights with colleagues and to work collaboratively on projects.

**Mid-Term Critical Essay on New Media Technology**. (25% of Grade). Critical thinking ability is a crucial skill in training journalists. Besides **Weekly Analysis Pieces** we will ask you to write a 2500-word essay staking out your own position on the linkages between new/emerging forms of media and public feedback. It teaches you to think critically about writing, develop your own analyses and communicate those ideas clearly and concisely to others. In case you choose your own topic, your topic should be specific, include a rich review of secondary literature, and be approved in advance by the Professor. Please plan to make a 15-minute presentation in week 8&15 classes.

**Final Project–A Research Proposal.** (25% of Grade). For your final paper, please develop a research proposal on a topic of your choosing. The proposal should be targeted toward research you could potential place in a top -tier journal in the communication field. Please include the following elements: a statement of research problem; research questions and goals; a review of existing literature; a rationale for conducting the study; an initial theoretical framework; and proposed research methods. Please plan to make a 15 -20 minute presentation of your research proposal during our last class meeting in week 8&15 classes.

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**GRADING SCALE**

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| --- | --- | --- | --- |
| А | 4,0 | 95-100 | Excellent  |
| А- | 3,67 | 90-94 |
| В+ | 3,33 | 85-89 | Good  |
| В | 3,0 | 80-84 |
| В- | 2,67 | 75-79 |
| С+ | 2,33 | 70-74 | Satisfactory |
| С | 2,0 | 65-69 |
| С- | 1,67 | 60-64 |
| D+ | 1,33 | 55-59 |
| D | 1,0 | 50-54 |
| F | 0 | 0-49 | Unsatisfactory |

**Seminars**

**WEEK 1 LECTURE: Introduction & Beats**

Seminar 1: Review of syllabus

Seminar 2: Defining Social Media

**SIS HA:** create a publishing space with your group; e-mail your beat partners; study the proposed topic for the project and draw a layout; acquaint yourself with Twitter, Facebook YouTube, Gmail and others.

**WEEK 2 LECTURE: Media Technology and Society**

Seminar 1: Introduction to Media Technology and Society

Seminar 2: XX century media technologies

**SIS HA:** present the final title of the introduction part of the Midterm project1 (the basic topic is presented at week 8 content). Send your findings to my e-mail by next Tuesday night.

**WEEK 3 LECTURE: The beginnings of networks**

Seminar 1: Brief presentation of the first wired network

Seminar 2: Defining the telephone network

**SIS HA:** Write a substantial blog post about the origins and transformation of digital culture. Pick several contemporary topics/areas where the tensions between old and new are evident — where you can see friction between the logic of traditional pre-Web cultural conventions and that of the current digital realm. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 4 LECTURE: Networks and recording technologies**

Seminar 1: Overview of broadcasting networks

Seminar 2: Digression: broadcasting networks and recording technologies

**SIS HA:** present the materials/documents to be used to draft your project. Send your findings to my e-mail by next Tuesday night.

**WEEK 5 LECTURE: Networks and recording technologies continue**

Seminar 1: Pre-satellite international radio links

Seminar 2: International wired links

**SIS HA:** Identify at least one (1) video that could be used for news reporting and be prepared to discuss. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 6 LECTURE: Communications satellites**

Seminar 1: Scientific competence and ideation: the communications satellites

Seminar 2: Prototypes: low and medium orbits

**SIS HA:** Choose one of the studies highlighted on the Journalist’s Resource article, (<http://journalistsresource.org/>) . In a blog post, use the study as a framework for evaluating the dynamics around an issue currently in communications satellites development.Send your findings to my e-mail by next Tuesday night.

**WEEK 7 LECTURE: Communications satellites** **continue**

Seminar 1: Social necessity and invention: the geostationary satellite

Seminar 2: Suppression: the international network

**SIS HA:** present the draft of the whole project in PPP. Send your draft project in 7-10 slides to my e-mail by next Tuesday night.

**WEEK 8 LECTURE: Legal contexts of digital media**

Seminar 1: project defending “Legal Codes, intellectual property and challenges to the system”

Seminar 2: Mid-Term Critical Essay 1 “Public Movement of Network and Social Media” or a student’s topic.

**SIS HA:** Review a study on Journalist’s Resource, “Quantifying Global Transfers of Copyrighted Content Using BitTorrent” (<http://journalistsresource.org/studies/economics/business/copyright-content-bittorrent>) . Use this study to help inform a blog post analyzing the emerging problems around copyright and larger questions of regulating the Web. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 9 LECTURE: The satellite era**

Seminar 1: Domestic satellites

Seminar 2: Direct broadcast satellites

**SIS HA:** present the final title of the introduction part of the Midterm project1 (the basic topic is presented at week 15 content). Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 10 LECTURE: Cable television**

Seminar 1: The return of the wire: cable television

Seminar 2: The impact of domestic satellites. The impact on broadcast television

**SIS HA:** present the materials/documents to be used to draft your project. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 11 LECTURE: The Internet**

Seminar 1: Prototypes and ideation: computer networks

Seminar 2: From necessity to diffusion: ARPANET to Internet

**SIS HA:** present the draft of the whole project in PPP in 7-10 slides. Send your draft project to my e-mail by next Tuesday night.

**WEEK 12 LECTURE: Networked sociality and the research world**

Seminar 1: Structures of Social Life

Seminar 2: Facebook, Twitter and Social Media – Research Findings

**SIS HA:** After reading “Twitter Reaction to Events Often at Odds with Overall Public Opinion,” (<http://journalistsresource.org/studies/politics/elections/pew-research-twitter-reaction-events-odds-overall-public-opinion>) find a thread, topic or hashtag on Twitter in which there appears to be dominant opinions or trends. In a blog post, analyze those trends, look at broader public opinions on the issue, and analyze the differences between the two based on what research has found. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 13 LECTURE: Digital Journalism**

Seminar 1: News and its problems

Seminar 2: The digital dynamics of the news media

**SIS HA:** Review the findings of the study “That’s Not the Way It Is: How User-Generated Comments on the News Affect Perceived Media Bias,” (<http://journalistsresource.org/studies/society/internet/user-generated-comments-news-media-bias>) posted at Journalist’s Resource. Write a blog post about the tension between promoting audience engagement and participation and some of the traditional practices and goals of institutional journalism. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 14 LECTURE: Big Data and the future of computation**

Seminar 1: Big data and its politics

Seminar 2: Big Data in political contexts

**SIS HA:** Review “A 61-Million-Person Experiment in Social Influence and Political Mobilization” (<http://journalistsresource.org/studies/politics/elections/facebook-61-million-person-experiment-social-influence-political-mobilization>) posted at Journalist’s Resource. In a blog post, analyze the study’s results and discuss how the intersection of social media and Big Data could shape the future of society. What are the potential problems? What are the benefits? What might the future look like? Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 15 LECTURE: Course Conclusion and Final Presentations**

Seminar 1: project defending “The digital dynamics of the news media” or a student’s topic.

Seminar 2: Mid-Term Critical Essay 2 “y “How User-Generated Comments on the News Affect Perceived Media Bias”

**SIS HA:** Finalize projects and presentations. Send the final work to my e-mail by next Tuesday night.

**STUDENT’S SELF INDEPENDENT STUDY TASKS**

**WEEK 1**

Create a publishing space with your group; e-mail your beat partners; study the proposed topic for the project and draw a layout; acquaint yourself with Twitter, Facebook YouTube, Gmail and others.

**WEEK 2**

Present the final title of the introduction part of the Midterm project1 (the basic topic is presented at week 8 content). Send your findings to my e-mail by next Tuesday night.

**WEEK 3**

Write a substantial blog post about the origins and transformation of digital culture. Pick several contemporary topics/areas where the tensions between old and new are evident — where you can see friction between the logic of traditional pre-Web cultural conventions and that of the current digital realm. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 4**

Present the materials/documents to be used to draft your project. Send your findings to my e-mail by next Tuesday night.

**WEEK 5**

Identify at least one (1) video that could be used for news reporting and be prepared to discuss. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 6**

Choose one of the studies highlighted on the Journalist’s Resource article, (<http://journalistsresource.org/>) . In a blog post, use the study as a framework for evaluating the dynamics around an issue currently in communications satellites development.Send your findings to my e-mail by next Tuesday night.

**WEEK 7**

Present the draft of the whole project in PPP. Send your draft project in 7-10 slides to my e-mail by next Tuesday night.

**WEEK 8**

Review a study on Journalist’s Resource, “Quantifying Global Transfers of Copyrighted Content Using BitTorrent” (<http://journalistsresource.org/studies/economics/business/copyright-content-bittorrent>) . Use this study to help inform a blog post analyzing the emerging problems around copyright and larger questions of regulating the Web. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 9**

Present the final title of the introduction part of the Midterm project1 (the basic topic is presented at week 15 content). Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 10**

Present the materials/documents to be used to draft your project. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 11**

present the draft of the whole project in PPP in 7-10 slides. Send your draft project to my e-mail by next Tuesday night.

**WEEK 12**

After reading “Twitter Reaction to Events Often at Odds with Overall Public Opinion,” (<http://journalistsresource.org/studies/politics/elections/pew-research-twitter-reaction-events-odds-overall-public-opinion>) find a thread, topic or hashtag on Twitter in which there appears to be dominant opinions or trends. In a blog post, analyze those trends, look at broader public opinions on the issue, and analyze the differences between the two based on what research has found. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 13**

Review the findings of the study “That’s Not the Way It Is: How User-Generated Comments on the News Affect Perceived Media Bias,” (<http://journalistsresource.org/studies/society/internet/user-generated-comments-news-media-bias>) posted at Journalist’s Resource. Write a blog post about the tension between promoting audience engagement and participation and some of the traditional practices and goals of institutional journalism. Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 14**

Review “A 61-Million-Person Experiment in Social Influence and Political Mobilization” (<http://journalistsresource.org/studies/politics/elections/facebook-61-million-person-experiment-social-influence-political-mobilization>) posted at Journalist’s Resource. In a blog post, analyze the study’s results and discuss how the intersection of social media and Big Data could shape the future of society. What are the potential problems? What are the benefits? What might the future look like? Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 15**

Finalize projects and presentations. Send the final work to my e-mail by next Tuesday night.

**LECTURE ABSTRACTS**

**WEEK 1 LECTURE: Introduction to Modern Media Technologies**

The concept of the ‘Information Revolution’ is implicitly historical, for how can one know that a situation has changed—has revolved—without knowing its previous state or position? Even the notion of a ‘Digital Age’ (to take another hyperbolic slogan) implicitly posits other preceding non-digital ages. It is therefore apposite to offer a critique of these ideas which is itself grounded in the past; in the historical circumstances surrounding the application of what may be broadly termed ‘science’, especially the science of electricity, to the human communication process.

Such an historical consciousness reveals the ‘Information Revolution’ to be largely an illusion, a rhetorical gambit and an expression of technological ignorance. The popular literature on these matters and the media resound with visions of techno-glory or apocalypse, the same set of phenomena being the source for both styles of pontificating. Curiously, more than a few supposedly scholarly works, again both the technophiliac as well as the jeremiads, exhibit the same traits—fervid but purblind imagination, unbalanced judgements and unidimensional insights.

**WEEK 2 LECTURE: Media Technology and Society**

Media Technology and Society offers a comprehensive account of the history of communications technologies, from the telegraph to the Internet. This widely researched history of communication and information technologies, from the printing press to the Internet, the development of new media forms, from the telegraph and the telephone to computers, satellites, and virtual reality, is the product of a constant play-off between social necessity and suppression. Current technologies are merely elaborating a process of change begun much earlier, and historical study of these alterations offers many insights into the potential effects of today's latest developments.

**WEEK 3 LECTURE: The beginnings of networks**

The networking of the world’s personal computers in the 1990s was heralded as creating a virtual new dimension of human experience. On the face of it seems to be an extraordinary claim, given that most technologies in this history have depended on exactly the establishment of such networks by corporeal or incorporeal means. In order to provide a context for outlining the development of the Internet we need to go back to the beginning, to the start of electronic communications, to show how central the building of networks has been to their success and how much the current networking of computers conforms to these historical patterns. In this last part, then, I will be revisiting all the technologies previously discussed, from telegraphy on, to describe how the concept of the network determined their diffusion and effectiveness.

**WEEK 4 LECTURE: Networks and recording technologies**

The sustained attack on the AT&T monopoly also effected the development of the radio network. This was because, although radio as a medium of mass communications depended on single point distribution, transmission masts, the creation of national radio networks relied on linking these central transmitters in the first instance by wires. In the United States, this once more involved AT&T. As we have seen, AT&T was one of the radio pioneers and had involved itself in running radio stations until 1926. But that same year a new opportunity opened up.

**WEEK 5 LECTURE: Networks and recording technologies continue**

Aside from issues of ownership, control and competition, the establishment of national broadcasting networks in either radio or television was quite difficult in America because of the time zones. The main broadcasting periods, which were to become ‘prime-time’ because of the premium prices commercials transmitted during these hours could command, were, more or less, the same everywhere (for example, mid-evening). In terms of simultaneous transmission, though, these ‘prime-times’ are as much as three hours apart in reality. The answer was either to repeat the programming live a few hours later for the West Coast, record it, or abandon the concept of the national audience. Since the last was commercially unthinkable and politically undesirable, and really effective recording techniques were unavailable, the live repeats technique was adopted.

**WEEK 6 LECTURE: Communications satellites**

The ground of scientific competence for the communications satellite includes two fundamentals. First is the theoretical understanding of how gravity might make ‘a projectile…revolve in an orbit, and go round the whole earth’ which was outlined by Newton in the Principia (Lovell 1973:9). Second is an understanding of rocketry.

The origins of the rocket are lost in time but it is noted as an instrument of war at the battle of K’ai-Feng-Foo in 1232. It became something of the weapon of the underdog, because igniting a combustible substance inside a tube requires no great theoretical knowledge nor, indeed, a very high level of technological wherewithal. Rockets were used, for example, against the British by the Sultan of Mysore in the battles of Seringapatam in 1792 and 1799. In the twentieth century, both in Russia and in a Germany constrained by the restrictions of the Treaty of Versailles, there

was considerable interest in rockets (Blagonravov 1996).

**WEEK 7 LECTURE: Communications satellites** **continue**

The United States now actively started to evolve policy for institutionalising a satellite communications system. Previous experience, as ever, was invoked. Early in 1959, the American tradition of state-aided entrepreneurship in telecommunications was confirmed for the new technologies of space when a House Committee determined that enough was now known to mandate the immediate creation of a ‘useful world-wide communication system based on the use of satellites’. Although nobody ‘was prepared to envisage a point in time when Government assistance in the form of providing launching vehicles…and actual launching operations would not be required’, nevertheless the aim should be the ‘complete commercial operation of the system’ (Oslund 1977:158). Bolstered by this, AT&T, despite its continued investment in transoceanic cables, took the satellite proposal it had been working on for six years to the FCC, formally requesting permission for a system with fifty low-altitude satellites in polar orbit and twenty-six ground stations to be co-owned between itself and the foreign telecommunications organisations which were its traditional international partners.

 **WEEK 8 LECTURE: Legal contexts of digital media**

Digital media are shaped not only by organizing bodies, legal codes and government regulations, but also social norms. This week explores the different aspects of Internet governance and how they impact its shape and structure.

**WEEK 9 LECTURE: The satellite era**

Comsat’s less than triumphal international progress was matched by its faltering advance domestically, although, initially, the company proved as attractive a stock as Congress had hoped. The 50 per cent available to the public was snapped up by 150,000 buyers and the value of their holdings, an average of twenty shares per person, doubled to $100 million. Otherwise Comsat suffered a string of defeats.

**WEEK 10 LECTURE: Cable television**

As the above account reveals, the wires never really went away. The early radio and television networks were wired and the transoceanic telephone cables have kept pace with the development of the international telecommunications satellite system. Yet, more than that, cables have always been used for the distribution of radio and television signals to the home. Indeed, cable has been,

from the outset, a viable alternative to free-air propagation. As Peter Eckersley, the engineer who had built the BBC’s SB wireless net, suggested to Reith, it was nothing less than a complete alternative to wireless transmission (Briggs 1961:358); but almost nowhere did this happen, nor has it developed in this way. Instead careful prevarication and delay has meant that, usually, cable has only been allowed to supplement the efforts of the broadcasters. It has taken decades to achieve even this limited function but it should be noted that at no time had this slow diffusion been occasioned by technological constraints. Cable has stood ready to supplant broadcasting from the very beginning of both radio and television; its failure so to is a further vivid example of the operation of the ‘law’ of the suppression of radical potential.

**WEEK 11 LECTURE: The Internet**

The ground of scientific competence for the Internet includes the existence of computers and the use of machine code compilers—languages—as a basis of communicating with them. The existence of telecommunications networks, which date back into the nineteenth century, is also obviously crucial as are the theoretical tools for the design of such networks, exemplified by the development of Information Theory in the late 1940s. This theory emerged, as we have seen, from Norbert Wiener’s wartime work on predictive gun-sights (which had led to the idea of ‘cybernetics’); and the formulae developed in 1949 at Bell Labs by Shannon and Weaver for designing the most efficient telephone systems possible.

**WEEK 12 LECTURE: Networked sociality and the research world**

The digital generation is driving many changes in society, but a number of scholars see a much broader process of social and cultural change. This week’s readings explore more general shifts in social media and social life. We also examine related findings of social scientists.

**WEEK 13 LECTURE: Digital Journalism**

While campaign organizations and political offices have undergone significant changes over the past 20 years, they’ve persisted institutionally. Journalism, however, has undergone rapid and profound shifts. This week looks at some of the shifts in new media and journalism from a host of different cultural, organizational, social and economic perspectives.

**WEEK 14 LECTURE: Big Data and the future of computation**

Seminar 1: Big data and its politics

Seminar 2: Big Data in political contexts

**SIS HA:** Review “A 61-Million-Person Experiment in Social Influence and Political Mobilization” (<http://journalistsresource.org/studies/politics/elections/facebook-61-million-person-experiment-social-influence-political-mobilization>) posted at Journalist’s Resource. In a blog post, analyze the study’s results and discuss how the intersection of social media and Big Data could shape the future of society. What are the potential problems? What are the benefits? What might the future look like? Send your findings in the form of short essay in 150-250 words to my e-mail by next Tuesday night.

**WEEK 15 LECTURE: Course Conclusion and Final Presentations**

This week concludes the course more speculatively with consideration of the emergence of Big Data and the future of computation more broadly. We will discuss the possibilities, and limits, of data, as well as its inherent political aspects.

**READINGS**

**Essential books**

The following are book-length works that speak to core issues touched on in this syllabus. Many are recent works that take the latest digital dynamics into account.

1. C.W. Anderson, Rebuilding the News. Temple University Press, 2013.
2. Bruce Bimber, Andrew Flanagin, Cynthia Stohl, Collective Action in Organizations: Interaction and Engagement in an Era of Technological Change. Cambridge University Press, 2012.
3. Sacha Issenberg, The Victory Lab: The Secret Science of Winning Campaigns. Crown, 2012.
4. Dave Karpf, The MoveOn Effect: The Unexpected Transformation of American Political Advocacy. Oxford University Press, 2012.
5. Daniel Kreiss, Taking Our Country Back: The Crafting of Networked Politics from Howard Dean to Barack Obama. Oxford University Press, 2012.
6. Rebecca MacKinnon. Consent of the Networked: The Worldwide Struggle for Internet Freedom. Basic Books, 2012.
7. Robert McChesney, Rich Media, Poor Democracy: Communication Politics in Dubious Times. The New Press, 2000.
8. Nicco Mele. The End of Big: How the Internet Makes David the New Goliath. St. Martin’s Press, 2013.
9. Evgeny Morozov, To Save Everything, Click Here: The Folly of Technological Solutionism. PublicAffairs, 2013.
10. John Palfrey and Urs Gasser, Born Digital: Understanding the First Generation of Digital Natives. Basic Books, 2008.
11. Eli Pariser, The Filter Bubble: How the New Personalized Web Is Changing What We Read and How We Think. Penguin Books, 2012.
12. Clay Shirky, Here Comes Everybody: The Power of Organization Without Organizations. Penguin Press, 2008.
13. Sherry Turkle, Alone Together: Why We Expect More from Technology and Less from Each Other. Basic Books, 2012.
14. Jonathan Zittrain, The Future of the Internet and How to Stop It. Yale University Press, 2009.

**Supplemental reading list**

1. M. Castells, Networks of Outrage and Hope: Social Movements in the Internet Age. Polity, 2012.
2. Andrew Chadwick, The Hybrid Media System. Oxford University Press, 2013.
3. Lynn. S. Clark, The Parent App: Understanding Families in the Digital Age. Oxford University Press, 2012.
4. Susan P. Crawford, Captive Audience: The Telecom Industry and Monopoly Power in the New Gilded Age. Yale University Press, 2013.
5. Kenneth Cukier, Viktor Mayer-Schonberger, Big Data: A Revolution That Will Transform How We Live, Work and Think. John Murray, 2013.
6. Laura deNardis, Protocol Politics: The Globalization of Internet Governance. Cambridge University Press, 2009.
7. Jennifer Earl, Katrina Kimport, Digitally Enabled Social Change: Activist in the Internet Age. MIT Press, 2011.
8. Lisa Gitelman, Raw Data Is an Oxymoron. MIT Press, 2013.
9. James Gleick, The Information: A History, a Theory, a Flood. Fourth Estate, 2011.
10. Jack Goldsmith, Tim Wu, Who Controls the Internet? Illusions of a Borderless World. Oxford University Press, 2008.
11. Lawrence Lessig, Remix: Making Art and Commerce Thrive in the Hybrid Economy. Penguin Press, 2008.
12. MacKinnon, Rebecca. 2012. Consent of the Networked: The Worldwide Struggle for Internet Freedom. New York: Basic Books.
13. Robert McChesney, Digital Disconnect: How Capitalism is Turning the Internet Against Democracy. New Press.
14. Gavin Newsom, Lisa Dickey, Citizenville: How to Take the Town Square Digital and Reinvent Government. Penguin Press, 2013.
15. Lee Rainie, Barry Wellman, Networked: The New Social Operating System. MIT Press, 2012.
16. Siva Vaidhyanathan, The Googlization of Everything (and Why We Should Worry). University of California Press, 2012.

**Exam questions on «New Media»**

1. Formation of media on the Internet.
2. Theoretical foundations of information and communication technologies in journalist activities.
3. Basics of search, collection and work with information in different formats;
4. Internet hardware and software functioning.
5. Internet-technologies and their application in all spheres of human life, including education and leisure.
6. New media. History. What is New Media? Globalization and new media.
7. New Media as a tool for social change. National security.
8. Interactivity and new media. Multimedia.
9. Multimedia news portals in Kazakhstan.
10. Foreign multimedia news portals.
11. Multimedia infotainment portals in Kazakhstan.
12. Foreign media infotainment portals.
13. The phenomenon of the blogosphere. Blogs and traditional media.
14. Computer networks. Internet. Computer security: basic concepts of local and global networks.
15. Network Services, an overview of the Internet, the connection to the Internet service provider; protocols TCP / IP; addressing Internet.
16. Concept of computer security and computer viruses and methods of protection against them; protection of information in the Internet, the concept of asymmetric encryption information, the principle of adequacy of protection, the concept of an electronic signature, the concept of electronic certificates.
17. Basic concepts of Word Wide Web: general concepts of browsers, access to the file archives.
18. Work in the browser: opening and view in web-pages; management techniques browser, work with multiple windows, setting the properties browser. Search information in World Wide Web.
19. Communication on the Internet: netiquette; service ICQ, Skype, MSN; overview of IRC; conversational servers’ www-interface.\
20. Publish Web-documents: the registration document on www-server, sending files to the server, transfer files using ftp-client, site registration on search engines