# Opasraportti

# HuTK - Masters Degree Programme in Science Communication TIEMA 2009-2011 (2009 - 2011)

Master's Degree Programme in Science Communication (TIEMA)

Responsible units: History of Science and Ideas, telephone: +358-8-553 3313 Information Studies, telephone: +358-8-553 3350

Address: TIEMA, P.O. Box 1000, FI-90014 University of Oulu, Finland Telephone: +358-8-553 3322 (Tuesdays and Thursdays) Email: tiema@oulu.fi Website: http://www.oulu.fi/hutk/en/studies/tiema/

#### Master's Degree Programme in Science Communication

The role of science, research and technology is becoming increasingly important, both from the social and economic viewpoint. Due to this, it is extremely important that the public and decision-makers will have access to up-to-date and understandable information about science. Master's Degree Programme in Science Communication (TIEMA) is designed to meet this challenge by providing its students with an opportunity to become experts in science communication skills as well as their understanding of scientific knowledge.

By learning to understand the nature of the media and the scientific community as well as the language inherent in them, the students of TIEMA will gain the ability to work as mediators between science and the media. The students will learn to think analytically, use various appliances, retrieve, manage and produce information effectively, and work independently on projects.

The Programme comprises 120 credits, leading to the completion of the MA Degree within two years, with the possibility of continuing towards a Ph.D.

The TIEMA Programme is organised and run jointly by the subjects of History of Science and Ideas, and Information Studies at the Faculty of Humanities.

#### Admission requirements

Science Communication may be taken as a major subject leading to the MA degree by anyone with a Bachelor's or higher level University Degree who has passed the entrance examination. Students with a Bachelor's Degree from a University of Applied Sciences are also eligible applicants providing their degree is in Communications. Along with fluency in spoken and written language and an interest in the media and the world of science, selected students are expected to show motivation and a commitment to attending classes regularly. Students are selected on the basis of their previous grades, an essay and an interview. The teaching language of the Programme is Finnish.

#### Study guidance

Study guidance is provided by the TIEMA Coordinator (+358-8-553 3322, on Tuesdays and Thursdays), the Professor of Information and Communication Studies (+358-8-553 3352) and the Professor of History of Science and Ideas (+358-8-553 3303).

#### **Employment prospects**

Students are provided with the necessary skills and knowledge to qualify for employment in scientific journalism, content production and other areas of science communication. The curriculum has been developed to allow students to pursue careers in the public, private and non-profit sectors, either as employees, freelancers or entrepreneurs.

#### Courses

1. Communication Research 25 credits

695100P Introduction to Communication Studies 5 credits 694597S Introduction to Science Communication 5 credits 694531S Changing Media Culture 5 credits 694532S Media Law and Ethics in the Media 5 credits 694533S Communication Research 5 credits

2. Science Studies 20 credits

694534S History of Science 3 credits 694535S Philosophy of Science and Scientific Argumentation 3 credits 694536S Sociology of Science 4 credits 694537S Publicity and Ethics of Science 3 credits 694538S Politics of Science 3 credits 694539S Bibliometric Research 4 credits

3. Practical Communication Skills 40 credits

695102P Internet Publishing 4 credits 694540S Journalism Workshop 11 credits (in two parts) 694541S Television Workshop 4 credits 694542S Radio Workshop 4 credits 694544S Communication and PR Workshop 5 credits 694547S Information Seeking and Retrieval Workshop 3 credits 694548S Science Education 3 credits 694613S Publication Design 6 credits

4. Pro Gradu Thesis and Seminar 35 credits

694549S Pro Gradu Thesis and Seminar 35 credits

5. Optional Study Units

695105P PR Communication 3 credits 694528S Business Plan 5 credits 694529S Work Practice 5 credits

# Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja jaksot

694539S: Bibliometric Research, 4 op 649528S: Business Plan, 5 op 694531S: Changing Media Culture, 5 op 694533S: Communication Research, 5 op 694544S: Communication and PR Workshop, 5 op 694534S: History of Science, 3 op 694547S: Information Seeking and Retrieval Workshop, 3 op 695100P: Introduction to Communication Studies, 5 op 694597S: Introduction to Science Communication, 5 op 694540S: Journalism Workshop, 11 op 694527S: Maturity Test (Master's Degree Programme in Science Communication), 0 op 694532S: Media Law and Ethics in the Media, 5 op 695105P: PR-Communication, 5 op 694535S: Philosophy of Science and Scientific Argumentation, 3 op 694538S: Politics of Science, 3 op 694526S: Practices in Communications, 1 - 3 op 694549S: Pro Gradu Thesis and Seminar, 35 op 694613S: Publication design, 6 op 694537S: Publicity and Ethics of Science, 4 op 694542S: Radio Workshop, 4 op 694548S: Science Education, 3 op 694536S: Sociology of Science, 3 op 694541S: Television Workshop, 4 op 695102P: Web Publishing, 4 op 694529S: Work Practice, 5 op

# Opintojaksojen kuvaukset

# Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

#### 694539S: Bibliometric Research, 4 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 4 credits Language of instruction: Finnish Learning outcomes: The student will have an understanding of informetric (bibliometric and webometric) methods and their application in publication research. Learning activities and teaching methods: Lectures and exercises Target group: Students of TIEMA Assessment methods and criteria: Assignment and term paper Grading: Pass/fail Person responsible: Professor Erkki Karvonen

Voimassaolo: 01.08.2007 - 30.09.2007 Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 5 credits Language of instruction: Finnish Learning outcomes: The student will understand the importance of a business plan in starting and developing a business. **Contents:** The student will draft a business plan based on his/her business idea in the field of Media and Communication. Learning activities and teaching methods: Work practise Target group: Students of TIEMA Assessment methods and criteria: Work practice of 2 months, written report on the practice Grading: Pass/fail Person responsible: Professor Erkki Karvonen Other information: Approved work practice settings include media institutions and science/technology enterprises and organizations.

#### 694531S: Changing Media Culture, 5 op

Voimassaolo: 01.08.2007 -**Opiskelumuoto:** Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: Changing Media Culture (OPEN UNI) ay694531S 5.0 op **ECTS Credits:** 5 credits Language of instruction: Finnish Learning outcomes: The student will have an understanding of the past, present and future development of media institutions and media use. **Contents: Developments of Media Culture** Learning activities and teaching methods: Lectures and literature Target group: Students of TIEMA, Master's Degree Programme in Business Communication, and Information Studies Assessment methods and criteria: Examination Grading: 0-5 Person responsible: Professor Erkki Karvonen

For students of Information Studies, the scope of the course is 6 credits (including an additional essay).

#### 694533S: Communication Research, 5 op

Voimassaolo: 01.08.2007 -**Opiskelumuoto:** Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: ay694533S Communication Research (OPEN UNI) 5.0 op ECTS Credits: 5 credits Language of instruction: Finnish Learning outcomes: The student will have an understanding of the foundations and approaches of various schools of communication research. Learning activities and teaching methods: Literature Target group: Students of TIEMA and Information Studies **Recommended or required reading:** Pietilä, Veikko: Joukkoviestintätutkimuksen valtateillä. Tutkimusalan kehitystä jäljittämässä. Tampere : Vastapaino, 1997 Tuomo Mörä, Inka Salovaara-Moring & Sanna Valtonen (toim.). Mediatutkimuksen vaeltava teoria. Helsinki : Gaudeamus, 2004. Assessment methods and criteria: Book examination or essay Grading: 0-5 Person responsible: Professor Erkki Karvonen

#### 694544S: Communication and PR Workshop, 5 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: ay694544S Communication and PR Workshop (OPEN UNI) 5.0 op

ECTS Credits:
5 credits
Language of instruction:
Finnish
Learning outcomes:
The student will have an idea of practical communication and PR work, cooperation between the scientific community and the media, the special nature of public dissemination of scientific knowledge and the relationship between journalism and communication/PR work.

Learning activities and teaching methods:

Lectures and exercises **Target group:** Students of TIEMA **Assessment methods and criteria:** Active participation, written work **Grading:** 0-5 **Person responsible:** Professor Erkki Karvonen

# 694534S: History of Science, 3 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 3 credits Language of instruction: Finnish Learning outcomes: The student will have an understanding of historical trends in various fields of science. Learning activities and teaching methods: Lectures and literature Target group: Students of TIEMA, students majoring or minoring in Information Studies Assessment methods and criteria: Examination Grading: 0-5 Person responsible: Professor Maija Kallinen

# 694547S: Information Seeking and Retrieval Workshop, 3 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 3 credits Language of instruction: Finnish Learning outcomes:

The student will understand the concepts of information seeking and information retrieval as well as their relationship. The student will also understand the principles of information retrieval and will be able to plan and carry out information retrieval as well as evaluate corresponding results in different contexts.

Contents:

Information sources, methods of information search and retrieval, evaluation of information sources and corresponding results, customer information retrieval

Learning activities and teaching methods:

Lectures and exercises

Target group: Students of TIEMA and Information Studies Assessment methods and criteria: Active participation, assignments Grading: Pass/fail Person responsible: Professor Erkki Karvonen Other information: For students of Information Studies, available as a 4-credit course.

#### 695100P: Introduction to Communication Studies, 5 op

Voimassaolo: 01.08.2005 -**Opiskelumuoto:** Basic Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: ay695100P Introduction to Communication Studies (OPEN UNI) 5.0 op **ECTS Credits:** 5 credits Language of instruction: Finnish Timing: 1st year Learning outcomes: The student will have an understanding of the basic concepts and theories of communication and the meaning of communication in our everyday lives. The student will be able to recognize and analyze everyday communication. **Contents:** Basic concepts and theories in Communication Learning activities and teaching methods: Lectures and literature Target group: Students of TIEMA, Master's Degree Programme in Business Communication, and Information Studies Assessment methods and criteria: Examination Grading: 0-5 Person responsible: Professor Erkki Karvonen Other information: For students of Master's Degree Programme in Business Communication, and Information Studies, available as a 3-credit course.

#### 694597S: Introduction to Science Communication, 5 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: ay694597S Introduction to Science Communication (OPEN UNI) 5.0 op

**ECTS Credits:** 5 credits Language of instruction: Finnish Timina: 1st year Learning outcomes: The student will have an understanding of the basics of science communication, internal and public communication of science, popularization of science, public dissemination of science as well as the ways science is presented in the media. Contents: **Basics of Science Communication** Learning activities and teaching methods: Lectures and literature Target group: Students of TIEMA, Master's Degree Programme in Business Communication, and Information Studies Assessment methods and criteria: Examination Grading: 0-5 Person responsible: Professor Erkki Karvonen Other information: For students of Information Studies, available as a 3-credit course.

# 694540S: Journalism Workshop, 11 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: ay694540S Journalism Workshop (OPEN UNI) 5.0 op

**ECTS Credits:** 11 credits 8in two parts) Language of instruction: Finnish Timing: 1st year Learning outcomes: The student will be able to engage in the process of journalistic work and write journalistic texts on the basis of various documents, databases, pictures, personal and background interviews, literature and other sources. Learning activities and teaching methods: Lectures and exercises Target group: Students of TIEMA Assessment methods and criteria: Active participation, written work Grading: 0-5 Person responsible: Professor Erkki Karvonen

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 0 credits

#### 694532S: Media Law and Ethics in the Media, 5 op

Voimassaolo: 01.08.2007 -**Opiskelumuoto:** Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: av694532S Media Law and Ethics in the Media (OPEN UNI) 5.0 op **ECTS Credits:** 5 credits Language of instruction: Finnish Learning outcomes: The student will have an understanding of media self-regulation (Council for Mass Media, Guidelines for Journalists, YLE's Broadcasting Guidelines) as well as the laws and regulations governing the media. Special attention will be paid to copyrights. Learning activities and teaching methods: Lectures, group work and literature Target group: Students of TIEMA, Master's Degree Programme in Business Communication, and Information Studies Assessment methods and criteria: Group work and examination Grading: 0-5 Person responsible: Professor Erkki Karvonen

#### 695105P: PR-Communication, 5 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Basic Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: av695105P PR-Communication (OPEN LINI) 5.0 (

ay695105P PR-Communication (OPEN UNI) 5.0 op

ECTS Credits: 3 credits Language of instruction: Finnish

#### Learning outcomes:

The student will understand the importance of external communication as a tool for supporting various organizational activities, in particular those of an enterprise. The student will also understand the principles of reputation and brand management as well as the nature of organizational communication. **Contents:** External Organizational Communication **Learning activities and teaching methods:** Lectures **Target group:** Students of TIEMA, Master's Degree Programme in Business Communication, and Information Studies **Assessment methods and criteria:** Examination **Grading:** 0-5 **Person responsible:** 

Professor Erkki Karvonen

# 694535S: Philosophy of Science and Scientific Argumentation, 3 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 3 credits Language of instruction: Finnish Learning outcomes: The student will have an understanding of the basic theories in philosophy of science, analysis of scientific argumentation as well as current approaches within the study of science. Learning activities and teaching methods: Lectures and literature Target group: Students of TIEMA, students majoring or minoring in Information Studies Assessment methods and criteria: Examination Grading: 0-5Person responsible: Professor Maija Kallinen

# 694538S: Politics of Science, 3 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 3 credits Language of instruction: Finnish Learning outcomes: The student will have an understanding of the politics of science, management of universities and research institutions, academic decision-making processes, research funding, and legislation on research. Learning activities and teaching methods: Lectures and literature Target group: Students of TIEMA, students majoring or minoring in Information Studies Assessment methods and criteria: Examination Grading: 0-5 Person responsible: Professor Maija Kallinen

### 694526S: Practices in Communications, 1 - 3 op

Voimassaolo: 17.11.2010 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 1-3 cr Language of instruction: Finnish Learning outcomes: After completing the course the student will have an understanding of the nature of various practices in communications and communication research Learning activities and teaching methods: Excursions, guest lectures, seminars and/or conferences Target group: Students of TIEMA Assessment methods and criteria: Active participation, learning diaries as agreed upon, presentation of the student's own research Grading: Pass/fail Person responsible: Professor Erkki Karvonen

# 694549S: Pro Gradu Thesis and Seminar, 35 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Diploma thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 35 credits Language of instruction: Finnish Learning outcomes: The student will be able to plan and student's thesis supervisor. The student

The student will be able to plan and write a pro gradu thesis, working independently and in cooperation with the student's thesis supervisor. The student is expected to participate actively in seminar meetings to discuss research plans, drafts and final versions of theses.

Learning activities and teaching methods:

Seminar, Pro Gradu Thesis **Target group:** Students of TIEMA **Assessment methods and criteria:** Active participation, Pro Gradu Thesis **Grading:** 0-5 **Person responsible:** Professor Erkki Karvonen

#### 694613S: Publication design, 6 op

Voimassaolo: 06.11.2008 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: ay694613S Publication design (OPEN UNI) 6.0 op

**ECTS Credits:** 6 credits Language of instruction: Finnish Learning outcomes: The student will be able to design publications using Adobe InDesign and Photoshop software. In addition to using the software, the student will have an idea of the entire process of publication design. Learning activities and teaching methods: Lectures and exercises Target group: Students of TIEMA Assessment methods and criteria: Active participation, assignments Grading: 0-5 Person responsible: Professor Erkki Karvonen

# 694537S: Publicity and Ethics of Science, 4 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 3 credits Language of instruction: Finnish Learning outcomes: The student will have an idea

The student will have an idea of various ethical approaches to problems related to science and its practitioners as well as its public communication. The student will also have an understanding of various requirements, problems and practices related to the public communication of science with a view to its popularization and the scientific community.

Learning activities and teaching methods: Web course Target group: Students of TIEMA Assessment methods and criteria: Active participation Grading: 0-5 Person responsible: Professor Maija Kallinen

#### 694542S: Radio Workshop, 4 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 4 credits Language of instruction: Finnish Learning outcomes: The student will understand the nature of radio as a medium and the special nature of radio expression. Learning activities and teaching methods: Lectures and exercises Target group: Students of TIEMA Assessment methods and criteria: Active participation Grading: Pass/fail Person responsible: Professor Erkki Karvonen

#### 694548S: Science Education, 3 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 3 credits Language of instruction: Finnish Learning outcomes: The student will have an idea of how to make science accessible and interesting to children and young people. Learning activities and teaching methods: Lectures, visits and exercises

Target group: Students of TIEMA Assessment methods and criteria: Active participation, written work Grading: 0-5 Person responsible: Professor Erkki Karvonen

### 694536S: Sociology of Science, 3 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opettajat: Kallinen, Maija Sinikka Opintokohteen kielet: Finnish

**ECTS Credits:** 4 credits Language of instruction: Finnish Learning outcomes: The student will have an understanding of the field of science that is devoted to studying the role and effects of science in society as well as various forces behind the progress of science. The student will have an idea of the basic questions and methods in the sociology of science, both at the theoretical and practical level. Learning activities and teaching methods: Lectures and literature Target group: Students of TIEMA, students majoring or minoring in Information Studies Assessment methods and criteria: Examination Grading: 0-5 Person responsible: Professor Maija Kallinen

#### 694541S: Television Workshop, 4 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 4 credits Language of instruction: Finnish Learning outcomes: The student will understand the nature of TV as a medium and the special nature of TV expression. Learning activities and teaching methods: Lectures and exercises Target group: Students of TIEMA Assessment methods and criteria: Active participation Grading: Pass/fail

### 695102P: Web Publishing, 4 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Basic Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 4 credits Language of instruction: Finnish Learning outcomes: The student will have an understanding of the nature of web publishing and will be able to create a simple web publication. **Contents:** Basics of Web Publishing Learning activities and teaching methods: Lectures and exercises Target group: Students of TIEMA, Master's Degree Programme in Business Communication, and Information Studies Assessment methods and criteria: Assignment Grading: Pass/fail Person responsible: Professor Erkki Karvonen

#### 694529S: Work Practice, 5 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 5 credits Language of instruction: Finnish Learning outcomes: The student will be able to apply his/her knowledge and skills to practical work situations. Learning activities and teaching methods: Work practice Target group: Students of TIEMA Assessment methods and criteria: Work practise of 2 months, written report on the practice Grading: Pass/fail Person responsible: Professor Erkki Karvonen Other information:

Approved work practice settings include media institutions and science/technology enterprises and organizations.