Final certification Course Syllabus

This course contributes to the requirements for the Degree of MSc in Computer Science

Title of the	Master's Degree Program Digital intelligent control systems		
Academic Program	(delivered in English)		
Type of the course	core /mandatory		
Course period	semesters 4-th semester: from February, the 1st to June, the 1st (16 weeks).		
Study credits	10 ECTS credits		
Duration	360 hours		
Language of instruction	English		
Academic requirements	 BSc degree in Computer Science or equivalent (transcript of records), good command of English (examination certificate or another formal document). Prerequisites: Advanced knowledge of math, digital electronics, programming skills. 		

Course Overview

Description

"Preparation for the thesis (Dissertation)" is a core course.

The aim of this course is twofold: one, to allow you to make progress on your research in a structured way and to help fulfill program requirements, and two, to present professionalization information crucial to success in the field. The course is organized largely around working on the PhD thesis (Dissertation), with the goal of making it to prepare to the dissertation committee, a conference-presentable and journal-publishable work.

The aim of the course is to guide graduate students through the process of writing a PhD thesis (Dissertation). This demands ability to link research question, research strategy, theory and methodology of experiment. The course will help the graduate students make a PhD thesis (Dissertation). Students will use the knowledge gained from course.

Course Objectives

- to teach graduate students to identify a research problem or research question;
- to familiarize graduate students with the methodology of working with primary sources;
- to familiarize graduate students with the main body of the PhD's work;
- to teach graduate students to present and discuss their own work;
- to teach graduate students to read and comment on the work of other students;

• to familiarize graduate students with the basic principles and requirements for submitting a dissertation for defense.

Learning Outcomes of the Course

By the end of the course, graduate students will know:

- writing a thesis and an article outline;
- references and research ethics;
- prepare a presentation of science project.

By the end of the course, graduate students will be able to:

- define a research problem or research question;
- build a scientific argument;
- present and discuss own work;
- read and comment upon another graduate students' work.

By the end of the course, students will possess:

- independent work, critical/analytical thinking;
- use scientific methods to analyze technical dimensions of knowledge and technology.

Course Structure

Learning Activities	Hours
Lectures	-
Seminars	-
Assignments	360
Final Exam (including preparation)	-
Total study hours	360

Detailed Schedule

Week	Seminars/ Assignments	Hours HA
Semester 4		
1	Getting started	20
2	The Research Advisor	20
3,4	Developing the proposal	40
5	Preparation of the proposal	20
6	The thesis or dissertation committee	20
7	Approval of the overview	30
8	Conduct of the study	20
9-14	Writing the manuscript	150
15	Defines of the thesis or dissertation	20
16	The completed thesis or dissertation and future growth	20

Course Instructor, contact information



Oleg V. Nepomnuashchiy,

Ph.D. in Engineering, Professor, Head of Computer Science Dept, School of Space and Information Technologies Siberian Federal University

e-mail: ONepomnuashy@sfu-kras.ru Google https://scholar.google.ru/scholar?hl=ru&as_sdt=0%2C5&q= непомнящий+олег+владимирович&btnG= Additional information is available at: https://structure.sfu-kras.ru/node/2153

Assessment

Assessment strategy	Points, max	Evaluation criteria
Personal project	60	Presentations, thesis, articles, the dissertation.
Final exam	40	Complex presentation of the project.

Grading policy for final assessment is:

- A (excellent work) 91–100 points
- B (above average) 81–90 points
- C (average) 71–80 points
- D (below average) 50–70 points
- F (failed) < 50 points

Attendance Policy

Graduate Students are expected to attend classes regularly.

Every topic involves an assignment. A written report on the assignment should be submitted within two weeks from the moment students received a list of problems. The final mark will rely on the same grading policy as for the final exam.

Web page of the course

Course materials and required reading materials are available on the webpage of the course <u>https://e.sfu-kras.ru/course/view.php?id=32916</u>, SibFU E-learning portal, <u>www.e.sfu-kras.ru</u>. You must be logged in to access this course.

Core reading

- J.S. Graustein. How to Write an Exceptional Thesis or Dissertation. Atlantic Publishing Group Inc.: 2014. p. 289. ISBN 13: 978-1-60138-603-8, ISBN-10: 1-60138-603-6.
- 2. Sharaf Alkibsi. How to Write a Thesis: Quick Tips on How to Finish your Thesis or Dissertation. Sharaf Alkibsi: 2016. p.191. ISBN: 9781310515675.
- James E. Mauch, Namgi Park. Guide to the Successful Thesis and Dissertation. A Handbook for Students and Faculty Fifth Edition. Marcel Dekker, Inc. New York: 2003. p. 329. ISBN: 0-8247-4288-5

Facilities, Equipment and Software

Internet access; Microsoft Office[®].