RIT Croatia

RIT CROATIA PROGRAM OUTLINE

PROGRAM TITLE: WEB AND MOBILE COMPUTING

TYPE OF PROGRAM: Undergraduate professional program

DURATION OF PROGRAM: 4 years /8 semesters

TOTAL NUMBER OF ECTS: 240

SCIENTIFIC AREA: Technical Sciences

SCIENTIFIC FIELD: Computing

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1. ENROLLMENT CRITERIA

Admission requirements: Upon completion of a high-school program students are admitted on the basis of results from the State Matura exams (state high-school exit exam) or results from the entrance exam for the undergraduate program.

Application process:
1. Candidates may apply to RIT Croatia using the Central Application System ("Postani student") and taking the State Matura Exams (state high-school exit exam):

   - Mathematics: B level
   - English language: B level

2. Candidates may apply to RIT Croatia through the entrance exam admission process consisting of written exams in Mathematics and English language. The entrance exam admission process is intended for the following candidates:

   - Candidates who have completed high school education prior to AY 2009/2010
   - Candidates who have completed vocational or art school programs, obtaining a basic or secondary professional high-school degree through in-school final assessments (completion of a final assignment)
   - Candidates who have completed their secondary education outside Croatia, not applying through the Central Application System.

2. CRITERIA FOR ENROLLMENT IN THE NEXT SEMESTER/YEAR LEVEL

A student must maintain a cumulative GPA of 2.00 or above at RIT Croatia in order to remain in good academic standing. Any student whose Term Grade Point Average falls below 2.00 (and is above 1.00) or whose overall Cumulative Grade Point Average falls below 2.00 will be placed on probation (i.e. is eligible to enroll in classes, though specific conditions of enrollment or restrictions will be applied).

Any student whose overall Cumulative Grade Point Average falls below 2.00 will be placed on academic warning.

Suspension refers to the academic action taken when a student is not permitted to enroll in courses at the university for a determined period of time.

- Any degree-seeking undergraduate student whose Term Grade Point Average falls below a 2.00 (C average) and for whom suspension is not applicable will be placed on probation.
- Any student who is on probation and who is not removed from probation in the two succeeding terms (including summer session) in which credit is attempted will be suspended from RIT Croatia for a period of one calendar year.

- Any student whose Term Grade Point Average falls below 1.00 will be suspended from RIT Croatia. Students will be able to return the following academic year, in the same term they were suspended.
- A suspended student cannot enroll in any credit or non-credit course at the university while on suspension. This also includes co-ops.
- A suspended student may not be admitted to another program while suspended.
- In special circumstances, a suspended student may apply in writing to the Associate Dean for Academic Affairs for a suspension waiver. This waiver request will be evaluated by the Associate Dean and the academic advisers before submission of the request to the Dean. This waiver must be approved by the Dean of the College.

The waiver carries specific responsibilities on the student's part. These may include registering in specific courses, achieving a semester GPA of at least 2.5, not withdrawing from any courses in which we will ask the student to enroll, taking a maximum term load of 12 credits, attending bi-weekly meetings with his or her faculty adviser. These responsibilities are stated in a contract the student will be required to sign. Should the student fail to abide by the conditions of the contract, or should the academic performance warrant suspension again, he or she would then be suspended with no opportunity to appeal.

3. TRANSFER PROCEDURE

Credit transfer procedure and transfer procedures generally speaking are defined by The Rulebook on Admission Requirements and Transfer Procedures from other HE institutions to RIT Croatia.

4. GRADUATION REQUIREMENT

WMC Graduation requirements
All of the following are required for graduation from a student's program:

- A Cumulative Grade Point Average (GPA) of 2.00 based on the US credits system
- Satisfactory completion of the Capstone Course
- Completion of 126 credits for the US degree and 240 ECTS for the Croatian degree
- Satisfactory completion and grade for the required co-ops in duration of 800 working hours
- No outstanding library dues
- Full payment or satisfactory adjustment of all financial obligations

Graduation with Honors
Honors posted to the academic record will be based upon the student's Cumulative Grade Point Average upon completion of the degree requirements. The numerical criteria for graduation with honors are as follows:

Summa cum laude	3.80 Cumulative GPA
Magna cum laude	3.60 Cumulative GPA
Cum laude	3.40 Cumulative GPA

5. DEGREES UPON COMPLETION OF THE STUDIES

RIT Croatia is the only educational institution in Croatia granting two degrees: an American degree from RIT and a Croatian degree from RIT Croatia.

Upon successful completion of the four-year program in Information Technology students receive a Bachelor of Science (B.S.) degree in Information Technology from RIT (all students enrolled as of 2016 receive a Bachelor of Science (B.S.) degree in Web and Mobile Computing). Studies at RIT Croatia are also accredited by the Croatian Ministry of Science, Education and Sports and meet the requirements of the Bologna Agreement. As a result, all students completing the four-year IT program will receive the degree title of stručni prvostupnik/prvostupnica (baccalaureus/ baccalaurea) inženjer/inženjerka informacijskih tehnologija.

In order to receive a Croatian degree from RIT Croatia students must have either a high school diploma issued by a Croatian high school or a high school diploma recognized by the Ministry of Science, Education and Sports of the Republic of Croatia.

6. PROGRAM OUTCOMES

The goal of the Web and Mobile Computing (WMC) program is to provide students with the knowledge and skills of developing and deploying software solutions in a professional environment. Our program is hands-on, challenging, and project-oriented, and combines a solid technological foundation with the essential skills of critical thinking, creativity and communication.

WMC graduates will be able to demonstrate the ability to work effectively as an individual, and as a team member or leader throughout the whole software development life cycle. They will be able to

- Analyze software users' needs in order to define system requirements, and then, create architectures and designs based on which a software solution is being developed.
- Apply the human-computer interaction (HCI) methods to create user-friendly components, spanning the development lifecycle from requirements analysis to product creation through system prototyping and usability testing.
- Create and analyze different designs in terms of contemporary design principles and patterns to develop software solutions or to improve the existing ones.
- Develop different types of software products such as web, mobile, and desktop applications, across several languages and platforms.
- Build software products that interact with databases.

- Effectively design, model, create, and utilize database to organize, store and retrieve data for use by software products.

This comprehensive knowledge enables graduates to impact the software development process at all levels, making them incredibly valuable to employers seeking today's application developers.

Typical job roles include database developer, web application developer, database administrator, mobile application developer, interaction designer, and applications developer.

List of Program Learning Outcomes

Discipline Specific Learning Outcomes
1. Analyze and design integrated information systems.
2. Create user-friendly components with user-centered design methods.
3. Create and deploy complex information systems.
4. Design and create systems using informatics techniques including information visualization.

General Education Learning Outcomes
1. Communication 1: Express oneself effectively in common college-level written forms using standard American English.
2. Communication 2: Revise and improve written products.
3. Communication 3: Express oneself effectively in presentation, either in spoken standard American English or sign language.
4. Communication 4: Demonstrate comprehension of information and ideas accessed through reading.
5. Critical Thinking 1: Use relevant evidence gathered through accepted scholarly methods and properly acknowledge sources of information.
6. Critical Thinking 2: Analyze or construct arguments considering their premises, assumptions, contexts, and conclusions, and anticipating counterarguments.
7. Critical Thinking 3: Reach sound conclusions based on logical analysis of evidence.
8. Critical Thinking 4: Demonstrate creative or innovative approaches to assignments or projects.
9. Artistic: Interpret and evaluate artistic expression considering the cultural context in which it was created.
10. Ethical: Identify contemporary ethical questions and relevant positions.
11. Global: Examine connections among the world's populations.
12. Math: Comprehend and evaluate mathematical or statistical information.
13. Natural Science Inquiry: Apply methods of scientific inquiry and problem solving to contemporary issues and scientific questions.
14. Scientific Principles: Demonstrate knowledge of basic principles and concepts of one of the natural sciences.
15. Social: Analyze similarities and differences in human social experiences and evaluate the consequences.

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7. LIST OF COURSES WITH ASSIGNED CREDITS (class and credit hours) and ECTS POINTS PER SEMESTER/YEAR LEVEL

YEAR 1

	FALL 1					
Course Number	Name	Class Hours	Lab Hours	Credit Hours	ECTS	Instructor
ISTE - 120	Computational Problem Solving in the Information Domain I	4	2	4	6	Domagoj Tolić
ISTE - 140	Web & Mobile I	3	0	3	6	Toni Njirić
NMDE - 111	New Media Design Digital Survey I	2	3	3	6	Ante Poljičak
MATH - 131	Discrete Mathematics	4	0	4	6	Ambroz Čivljak
UWRT - 100	Critical Reading and Writing	3	0	3	6	Rebecca Charry
YOPS - 10	RIT 365: RIT Connections	1	0	0	0	Milena Kužnin
ELCA - 062	Introduction to Academic English	4	0	0	0	Zrinka F. Sain

	SPRING 1					
Course Number	Name	Class Hours	Lab Hours	Credit Hours	ECTS	Instructor
ISTE - 121	Computational Problem Solving in the Information Domain II	4	2	4	6	Domagoj Tolić
ISTE - 240	Web and Mobile II	3	0	3	6	Andrej Šarić
ISTE - 230	Intro to Database & Data Modeling	3	0	3	6	Toni Njirić
MATH - 161	Applied Calculus	2	2	4	6	Ambroz Čivljak
UWRT - 150	Writing Seminar	3	0	3	6	Rebecca Charry

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YEAR 2

Course Number	FALL 2 Name	Class Hours	Lab Hours	Credit Hours	ECTS	Instructor
ISTE - 222	Computational Problem Solving in the Information Domain III	3	0	3	6	Toni Njirić
ISTE - 260	Designing the User Experience	3	0	3	6	Aleksander Radovan
NSSA - 290	Networking Essentials for Developers	3	0	3	6	Toni Njirić
UWRT - 150	Writing Seminar	3	0	3	6	Rebecca Charry
MLSP - 201	Beginning Spanish I	2	2	4	6	Barbara Perić
MLGR - 201	Beginning German I	2	2	4	6	Nikolina Božinović
MLIT - 201	Beginning Italian I	2	2	4	6	Zrinka F.Sain
MLRU - 201	Beginning Russian I	2	2	4	6	Ana Peković
MLFR - 201	Beginning French I	2	2	4	6	Tea Kovačević
ACSC - 064	Essential Study Techniques	1	0	0	0	Francis Brassard

Course Number	SPRING 2 Name	Class Hours	Lab Hours	Credit Hours	ECTS	Instructor
SWEN - 383	Software Design Principles & Patterns	3	0	3	6	Domagoj Tolić
ISTE - 340	Client Programming	3	0	3	6	Toni Njirić
ISTE - 330	Database Connectivity and Access	3	0	3	6	Toni Njirić
ISTE - 252	Foundation of Mobile Design	3	0	3	6	Domagoj Tolić
ISTE - 099	Second Year Seminar	1*	0	0	0	Domagoj Tolić
MLSP - 202	Beginning Spanish II	2	2	4	6	Barbara Perić
MLGR - 202	Beginning German II	2	2	4	6	Nikolina Božinović
MLIT - 202	Beginning Italian II	2	2	4	6	Zrinka F. Sain
MLRU - 202	Beginning Russian II	2	2	4	6	Ana Peković
MLFR - 202	Beginning French II	2	2	4	6	Tea Kovačević

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YEAR 3

	FALL 3					
Course Number	**Name**	**Class Hours**	**Lab Hours**	**Credit Hours**	**ECTS**	**Instructor**
ISTE - 341	Server Programming	3	0	3	6	Domagoj Tolić
ISTE - 422	Application Development Practices	3	0	3	6	Toni Njirić
ENGL - 210	Literature, Culture and Media	3	0	3	6	Rebecca Charry
MLSP - 301	Intermediate Spanish I	2	1	3	6	Barbara Perić
MLIT - 301	Intermediate Italian I	2	1	3	6	Zrinka F. Sain
MLGR - 301	Intermediate German I	2	1	3	6	Nikolina Božinović
MLFR - 301	Intermediate French I	2	1	3	6	Tea Kovačević
ANTH - 350	Global Economy and Grassroots	3	0	3	6	Vanda Bazdan

	SPRING 3					
Course Number	**Name**	**Class Hours**	**Lab Hours**	**Credit Hours**	**ECTS**	**Instructor**
ISTE - 442	Web Application Development	3	0	3	6	Martin Žagar
ISTE - 444	Web Server Admin Dev	3	0	3	6	Mario Silić
ENVS - 150	Ecology of Dalmatian Coast	2	2	4	6	Marlena Ćukteraš
PHIL - 202	Foundations of Moral Philosophy	3	0	3	6	Vanda Bazdan
MLGR - 302	Intermediate German II	2	1	3	6	Nikolina Božinović
MLIT - 302	Intermediate Italian II	2	1	3	6	Zrinka F. Sain
MLSP - 302	Intermediate Spanish II	2	1	3	6	Barbara Perić
ANTH - 301	Social and Cultural Theory	2	1	3	6	Vanda Bazdan

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YEAR 4

Course Number	FALL 4 Name	Class Hours	Lab Hours	Credit Hours	ECTS	Instructor
ISTE - 454	Mobile Application Development I	3	0	3	6	Andrej Šarić
ISTE - 500	Senior Development Project I	3	0	3	6	Martin Žagar
ANTH - 350	Global Economy and Grassroots	3	0	3	6	Vanda Bazdan
ENVS - 151	Scientific Inquiries in Environmental Science	2	2	4	6	Marlena Ćukteraš
	Free Elective	3	0	3	6	

Course Number	SPRING 4 Name	Class Hours	Lab Hours	Credit Hours	ECTS	Instructor
ISTE - 456	Mobile Application Development II	3	0	3	6	Andrej Šarić
ISTE - 501	Senior Development Project II	3	0	3	6	Martin Žagar
SOCI - 230	Sociology of Work	3	0	3	6	Vanda Bazdan
ENGL - 361	Technical Writing	3	0	3	6	Zrinka F. Sain
	Free Elective	3	0	3	6	

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YEAR 1 – COURSE DESCRIPTIONS

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Computational Problem Solving in the Information Domain I

Course Description

This is the first course in the introductory programming sequence required for all Information Technology students. Topics include elementary data types, arithmetic and logical operations, control structures and error handling, methods, inheritance, reusability, input/output and an object-oriented programming design and implementation. Emphasis is placed on the development of problem-solving skills. Moderately large programming assignments are required.

Course objectives

General:

This course will provide students with the foundational skills necessary to do object-oriented programming. Emphasis is placed on program design methodologies and problem solving using commonly available development tools.

Specific:

Upon course completion, a student should be able to implement moderately large programming projects and should:

- Demonstrate the ability to configure a computer to create, compile, and run programs.
- Demonstrate the ability to write statements using different data types and operators that perform necessary operations based on the program's requirements.
- Be able to analyze errors that occur when programs run and make changes based on this feedback. Be able to use sequence, selection and loop statements to control the execution of a program.
- Demonstrate the ability to create methods with or without return values that perform various operations, and invoke them.
- Be able to use utility Application Programmer Interface (API) classes such as Math and String, and use their methods to solve various problems.
- Demonstrate the ability to create a class by defining both attributes that describe the state of the class and methods that enforce Object Oriented Programming (OOP) encapsulation principles.
- Be able to define arrays, and determine when to create and use arrays.
- Demonstrate the ability to work with multiple classes and multiple instantiations of a class.
- Write object-oriented programs with multiple class files and create objects used between class files
- Write event-driven programs using distinct listener class file objects and/or same class file listener objects

- Write object-oriented programs using class inheritance
- Write interface and abstract class files and use them in object-oriented programs
- Write object-oriented programs to read and write data using the java.io package
- Write classes with catch and throw exception class objects
- Write programs that pass and receive objects via an object method

Grading

Homework Assignments	20%
Labs	20%
Practical Exam 1	5%
Practical Exam 2	10%
Practical Exam 3	15%
Practical Exam 4	15%
Comprehensive Theory Exam	15%
Total	100%

Class format:
Class hours 4. Lab hours 2

Course materials and textbooks
"Big Java: Compatible with Java 5, 6 and 7" by Cay S. Horstmann

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Web and Mobile I

Course Description

This class provides an introduction to key Internet, web, and multimedia technologies, as well as familiarity with the Macintosh computer platform. Topics covered include computer-mediated communication, basic Internet applications such as telnet, FTP, and the WWW, basic digital image techniques, and web page development and publishing.

Course Objectives
General:

This course provides a basic introduction to Internet technologies and web development. The Internet technology topics (UNIX, FTP, Telnet, email, protocols, etc.) provide a foundation for a variety of IT core courses. The web development and imaging topics provide an introduction to the multimedia and web development topic area within the department, and are a prerequisite for concentration-level courses in the computer-mediated experience area of the curriculum.

Specific Objectives

By the end of the semester, students will have a working knowledge of:

- Key figures and events in the development of the Internet and the World Wide Web
- How to use Internet search engines to search for and retrieve information relevant to assignments and projects
- Internet protocols and tools, including SSH, SFTP, electronic mail, and conferencing
- How to perform basic file and directory management tasks in Unix environments
- The components of digital images, sound, and video, including file formats, resolution, color models, and compression methods
- How to use imaging programs (e.g., Photoshop) to create graphic elements for web pages, including logos and composite images
- How to create web pages using valid HTML and CSS
- How to identify and implement basic principles of graphic design, including contrast, alignment, proximity, repetition, and effective use of color and type
- How to use server technologies (e.g., Server-side Includes) for cross-browser issues
- Utilize the Macintosh operating environment and applications for web development tasks.

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By the end of the quarter, students will be able to:
- Build a multi-page web site, including graphics and media
- Apply appropriate design principles to the design of a site
- Create or modify graphics for inclusion in a web site
- Mount their website on a designated server
- Work with a Macintosh operating environment comfortably

Grading:

Web Project 1	10%
Web Project 2	15%
Web Project 3	15%
Attendance, Participation	10%
Homework	10%
Midterm Exam	10%
Midterm Practical	10%
Final Exam	10%
Final Practical	10% + Pass/Fail
Total	100%

Class format: Class hours 3 Lab hours 0

Course materials and textbooks:
The following text is optional, but suggested for reference:
- Web Development & Design Foundations with HTML5, 8th edition by Felke-Morris, © 2016 Pearson, Inc.ISBN-13: 978-0134322759

Watch the online video courses at linda.com provided by RIT Library: http://library.rit.edu

Below are some important links that you will use frequently throughout the semester:
- HTML Validator: http://validator.w3.org/
- CSS Validator: http://jigsaw.w3.org/css-validator/
- Web Development Tutorials: http://www.w3schools.com

New Media Design Digital Survey I

Course Description

This project-based course is an investigation of the computer as an illustrative, imaging, and graphical generation tool. It develops foundational design skills in raster and vector image creation, editing, compositing, layout and visual design for online production. Emphasis will be on the application of visual design organization methods and principles for electronic media. Students will create and edit images, graphics, layouts, and typography to form effective design solutions for online delivery.

Course objectives

In general, after completing this course, students should

- Introduce the fundamental creative principles for generating digital content and designs that communicates concise and impactful visual messages
- Understand the technical principles and tools of digital graphics
- Introduce principles and methods of visual organization, design and graphic analysis
- Develop skills that allow the student to decide the best options to generate and output content for digitally based imagery and design
- Develop visual solutions using observational drawing, sketching, image manipulations well as photographic techniques and imagination
- Develop solutions that reflect semiotic concerns of effective communication including aesthetic considerations, appropriate concept development and pragmatic concerns
- Understand the ethics and copyright issues of digital graphics.

Learning outcomes

- Demonstrate content creation methods using image and graphical manipulation
- Demonstrate effective design solutions using complex imagery, layout and typographical elements
- Evaluate the use and effectiveness of imaging, visual design solutions and aesthetic qualities
- Understand and display creative and conceptualization skills through research and documentation
- Demonstrate visual solutions and content creation for editorial design problems
- Apply visual design elements, principles, imagery and layouts to interactive creative problems
- Generate effective visual graphics for user interface elements and icons.

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Grading:

Project 1	15%
Project 2	15%
Project 3	15%
In-Class Exam	15%
Practical Exams	10%
Lab Assignments	20%
Homework	10%
Total	100%

Class format: Class hours 2   Lab hours 3

Course materials and textbooks:

Online educational resources (i.e. Lynda.com, Cineversity.com, psdTuts.com)

Instructor Handouts and Video Tutorials

Computer with appropriate software and Internet access

Applicable textbooks (Beyond Photoshop, The Illustrator WoW, Teaching Design)

Discrete Mathematics

Course Description:

This course in an introduction to the topics of discrete mathematics, including number systems, sets and logic, relations, combinatorial methods, graph theory, regular sets, vectors, and matrices

Goals of the Course:

- To provide students with knowledge of the mathematical concepts needed for understanding and analyzing programming.
- To discuss the many applications of mathematics to computer science and computer information systems.
- To stress the applications of theorem results in Information Technology

Learning outcomes and associated assessment methods of those outcomes

- Students will learn the mathematical concepts needed to understand and analyze programs:
  - Use notation of set theory and logic and elementary proof techniques, write proof by induction
  - Use language of set theory to analyze relations, functions, graphs, and inverse functions
  - Use Boolean algebra to analyze disjunctive and conjunctive normal forms and Karnaugh maps
  - Use binary, octal and hexadecimal number representations
- Students will learn about applications of mathematics to computer science and computer information systems.
- Students will understand the applications of theorem results in Information Technology.

Program or general education goals supported by this course

- to develop students' understanding of the mathematical framework that supports engineering, science, and applied mathematics
- to develop a capacity for critical and analytical thinking.
- to develop an appropriate level of mathematical literacy and competency.

Grading

First Test	30%
Second Test	30%
Final test	30%
Attendance	5%
Homework	5%
Total	100%

The A-F letter grade is computed according to the standard 100% system:
A = 91-100;   B = 80-89;   C = 70-79;   D = 60-69;   F = 0-59.

Class format: Class hours 4. Lab hours 0

Course materials and textbooks:

- S. Lipschutz and M. Lipson, Discrete Mathematics, Schaums's Outlines, Third Edition, ISBN 978-0-07-161586-0.
- W. D. Wallis, A beginner's Guide to Discrete Mathematics, Birkhäuser, ISBN 0-81764-269-2.
- J. Molluzzo and F. Buckley, A First Course in Discrete Mathematics, Waveland Press, Inc.,   ISBN 0-88133-940-7.

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Critical Reading & Writing

Course description

Critical Reading and Writing is a one semester, three-credit course designed to help students develop the literacy practices they will need to be successful in college.

Course objectives

Assignments are designed to challenge students intellectually and to stimulate their writing. By exploring different genres, students learn how writers employ basic features and strategies of a genre to reflect different rhetorical purposes. Through writing assignments, students will develop strategies for creative writing, generating ideas, and revising. Through inquiry-based assignment sequences, students will develop academic and literacy practices that will be further strengthened in their First-Year Writing Seminar course. Particular attention will be given to critical reading, information management, and synthesis of source materials, academic writing conventions, and revision. The course also emphasizes the principles of intellectual property and academic honesty.

Students will read, understand, interpret, and synthesize a variety of texts representing different cultural perspectives and/or academic disciplines.

Peer Response Groups will help students to learn how to analyze their own and others' works in order to become more independent and competent readers and writers. They will practice appropriate means of documenting their work.

Students will practice correct syntax, grammar, punctuation, and spelling in an applied way: they will apply various structures in conversation or written/oral exercises.

Learning outcomes

- Students will be able to write from specific perspectives, in discipline-specific assignments, and to specific audiences.
- Students will be able to apply the writing process to different writing contexts (e.g. personal essay, formal academic writing, and impromptu in-class writing).
- Students will use instructional feedback concerning strengths and weaknesses of their writing and suggested strategies for improvement in their revisions. Students will learn to recognize their own individual strengths and weaknesses as writers, and identify areas and strategies for improvement.
- By the end of the course, students will be able to revise their own writing independently in substantive ways.
- Students will be able to recognize and avoid various kinds of plagiarism by knowing how to synthesize sources into their own papers appropriately.
- Students will be familiar with RIT's policy on academic honesty.
- Students will be able to express meaning with grammatical clarity and mechanical accuracy in Standard Written English, understanding how to consult a writer's reference book as needed.

Grading

Paper 1: Descriptive Essay	10%
Paper 2: Critical Response Essay	15%
Paper 3: Persuasive essay	15%
Grammar Quiz	20%
Vocabulary Quiz	15%
Spelling Quiz	10%
Class Participation	15%
Total	100%

Class format: 50 minute lesson three times a week

Course materials and textbooks:
Textbooks

- Axelord, Rise B., and Charles R. Cooper. *The St. Martin's Guide to Writing*. 10th ed. Boston: Bedford/St.Martin's, 2013. Print.
- Lunsford, Andrea A. *The Everyday Writer*. 5th ed. Boston: Bedford/St.Martin's, 2013. Print.
- Clee, Paul., and Violeta Radu-Clee. *American Dreams: Readings for Writers*. Mayfield Publishing Company, CA, 1996.
- Halpern, Diane F., and Heidi R. Riggio. *Thinking Critically About Critical Thinking.A Workbook to accompany Thought & Knowledge: An Introduction to Critical Thinking.* 4th ed. New Jersey/London: Lawrence Erlbaum Associates, Publishers, 2003. Print.
- Deane, Mary and Erik Borg. Critical Thinking and Analysis. Longman/Pearson, 2011.
- Azar, Betty Schrampfer, *Basic English Grammar*, 3rd ed. New York: Pearson Education, Longman, 2006. Print.

Additional Course Material

Note: A selection from different textbooks will also be used for this course and students will be given the material to study when they meet with their instructor or the material will be uploaded on myCourses.

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RIT 365 Connections

Course Description

RIT 365 students participate in experiential learning opportunities designed to launch them into their career at RIT, support them in making multiple and varied connections across the university, and immerse them in processes of competency development. The core of this course is the Plan-Do-Reflect Cycle, comprised of strategizing for an impending action, engaging in the action or activity, and thoughtfully considering the implications of the action in which they engaged. Students will receive feedback and develop a personal plan for future action in order to develop foundational self-awareness and recognize broad-based professional competencies.

Learning Outcomes:

- Students are engaged with the RIT community by participating in the following:
    - The Experiential Learning Process (Plan-Do-Reflect) during campus experiences;
    - Dialogue related to Super Speaker events.
- Students have a positive impact on the community by:
    - Engaging in reflective dialogue;
    - Contributing their knowledge and experiences to the group experience.
- Students have a connection to an RIT community member (faculty, staff or alumni) by:
    - Attending and contributing to dialogue related to Super Speaker events;
    - Engaging in reflective dialogue at least once during the semester in coaching appointments.
- Students develop foundational self-awareness through the following activities:
    - Meeting with their RIT 365 facilitator to reflect on their first-year experiences;
    - Documenting skills and competencies gained in their first year in an online portfolio.
- Students are able to use intentional strategies (tools) to enhance their personal growth through:
    - Determine potential tools to aid in personal development, and plan for current and future decisions;
    - Planning to gain skills and competencies in addition to those, they document in an online portfolio, identifying tools necessary to gain those skills and competencies.
- Students will develop a plan to build broad-based professional competencies (including communication, critical thinking and collaboration) by:
    - Identify competencies they intend to build, and create a plan for competency development;

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Grading: This is a pass/fail course. Students will receive a passing grade by:

- Attending class and participating
- Attending a Super Speaker event
- Writing a Six Word Story
- Completing 4 Individual Experience Assignments
- Attending a 365 Coaching session

Class format: Class hours 1, lab hours 0

Course materials/resources:
SIS: https://www.rit.edu/infocenter/
MyCourses: https://mycourses.rit.edu/
Wallace Library: https://library.rit.edu/
Study Tool Kit: https://www.rit.edu/studentaffairs/asc/quick-links/study-tool-kit

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Introduction to Academic English

Course Description

In Introduction to Academic English, students increase their knowledge and control of grammatical structures in writing. This course focuses on the content, structure, and organization of sentences and paragraphs. Students will practice and improve their skills in the writing process, including prewriting, writing, revision, and editing techniques.

Course objectives

- further develop proficiency in using English in an academic setting
- develop basic academic writing skills
- develop various reading strategies
- develop language learning strategies

Learning outcomes

Students will

- be able to use correct word order in a sentence,
- be able to use the right collocations,
- be able to use idioms appropriately,
- be able to use basic tenses to write about past, present, and future events,
- be able to apply punctuation and capitalization rules,
- be able to write simple and compound sentences,
- be able to write short and clear paragraphs,
- be able to understand a variety of shorter texts,
- be able to distinguish the properties of academic style from less formal styles,
- be able to draft and revise their writing,
- understand the importance of academic honesty,
- receive feedback from their peers and give feedback to their peers.

Grading

Quiz 1	10%
Quiz 2	10%
Quiz 3	10%
Quiz 4	10%
Quiz 5	10%
Quiz 6	10%
Writing 1	15%
Writing 2	15%
Participation/Homework	10%
Total:	100%

Students need to acquire at least 60 points in order to pass the course.

Class format: Class hours 4 Lab hours 0

Course materials and textbooks:
- Butler, L. (2007). *Fundamentals of Academic Writing.* New York, NY: Pearson Longman.
- Hogue, A. (2008). *First Steps in Academic Writing*. New York, NY: Pearson Longman.

Computational Problem Solving in the Information Domain II

Course Description

This is the second course in the introductory programming sequence required for all students majoring in Information Technology. Topics include GUI interface development, file I/O, traditional programming data structures, programming utilities and reusability, introductory project design and management concepts and other concepts as time permits. Emphasis is placed on the development of problem-solving skills. Large programming assignments are required.

Course objectives

General:

The purpose of this course is to provide students with an introduction to the advanced concepts and skills needed to support the programming requirements of up-stream courses in the IST curriculum. Specifically, this course is intended to encourage students to continue to develop their problem solving skills, to begin building a "logical toolkit" of algorithms and data structures, and to understand the benefits of reusability. Students should also grasp the basics of program analysis, design and project management skills.

Contribution to Measurable Program Outcome(s):
- Program effectively within the student's specialty area
- Apply a development life cycle to a problem
- Design and develop a software prototype
- Participate effectively as a team member and/or leader
- Practice user-centered design, development, and deployment
- Make effective oral presentations

Specific:

At the end of this course, a student should be able to implement moderately large programming projects both individually and in a team. Specifically, a student should:
- Demonstrate the ability to create graphical user interfaces based on a problem description.
- Demonstrate the creation and use of reusable objects.
- Demonstrate the use of the language-supplied data structure classes within a program.
- Be able to create, read and write character-based files, showing knowledge of the way data is represented.
- Be able to create, read and write byte-based files, showing knowledge of the way data is represented.
- Determine when it is appropriate to use threads and demonstrate how to

create a multi-threaded program.
- Demonstrate how to communicate between two machines using the network programming classes.
- Be able to design and implement a fairly large project as part of a team.

Grading

Homework assignments	25%
Lab assignments	10%
Practical Exam 1	10%
Practical Exam 2	15%
Practical Exam 3	15%
Final Theory Exam	5%
Final Project	20%
Total	100%

Class format:

Class hours 4. Lab hours 2

Course materials and textbooks:

"Big Java: Compatible with Java 5, 6 and 7" by Cay S. Horstmann

RIT | Croatia

Web & Mobile II

Course Description

This course builds on the basics of web page development that are presented in *Web & Mobile I* and extends that knowledge to focus on theories, issues, and technologies related to the design and development of web sites. An overview of web design concepts, including usability, accessibility, information architecture, and graphic design in the context of the web will be covered. Introduction to web site technologies, including HTTP, web client and server programming, and dynamic page generation from a database also will be explored. Development exercises are required.

Prerequisites: ISTE-120 and ISTE-140 or equivalent course.

Course Objectives

Among others, following topics will be covered in this course:

- Web and Mobile Design, CSS Positioning and Responsive Design
- Information Architecture and the DOM
- CSS Frameworks
- JavaScript, JavaScript Libraries, Client-Side Form Validation
- Introduction to PHP, Server-Side Form Validation
- AJAX with JavaScript and PHP
- Database Connectivity, MySQL, phpMyAdmin

Learning Outcomes

By the end of this course, the student should be able to:

- Demonstrate proficiency in web site design, planning and documentation as part of a team.
- Use information design, graphics, and markup languages to create medium scale web sites.
- Use client side programming such as JavaScript and the document object model to create dynamic and interactive web pages.
- Use server side programming and databases to improve site performance, modularization, and separation of logic from data.
- Use the HTTP protocol to properly submit, validate and process user input data.

Grading

Assignments (Homework & In-Class)	20%
Individual Projects	40%
Group Projects	25%
Final Practical	15%
TOTAL:	100%

Class format: Class hours 3, Lab hours 0

Course Materials and Textbooks

This course does not require any textbooks. All required readings will be from digital media and will be linked or posted on myCourses.

RIT | Croatia

Intro to Database and Data Modelling

Course Description

A presentation of the fundamental concepts and theories used in organizing and structuring data. Coverage includes the data modeling process, basic relational model, normalization theory, relational algebra, and mapping a data model into a database schema. Structured Query Language is used to illustrate the translation of a data model to physical data organization. Modeling and programming assignments will be required.

Course objectives

Provide students with the foundation skill set required to organize and to structure data for subsequent computer processing. The skill set includes the ability to interpret Entity-Relationship data models, to translate an Entity-Relationship data model into a theoretical data model, to apply normalization theory.

Grading

Your final grade will be based on the work you submit, your demonstration of knowledge on exams, and your participation in the course.

Homework	40% (equal weighting)
Midterm Exam	15%
Midterm Practical	15%
Final Exam	15%
Final Practical	15%
Total	100%

Class format: Class hours 3 Lab hours 0

Course materials and textbooks:

There are no required textbooks for the course.

If you feel that a textbook would be a helpful resource for you, the following texts are suggestions for this course:

- Kroenke, David M. and Auer, David J., Database Concepts (6th Edition) Pearson Prentice-Hall, Upper Saddle River, NJ, 2012. ISBN-13: 978-0132742924
- Fehily, Chris, SQL Visual QuickStart Guide (3rd Edition), Peachpit Press, Berkeley CA, 2008. ISBN-13: 978-0321553577

Applied Calculus

Course Description

This course is an introduction to the study of differential and integral calculus including the study of functions and graphs, limits, continuity, the derivative, derivative formulas, application of derivatives, the definite integral, the fundamental theorem of calculus, basic techniques of integral approximation, exponential and logarithmic functions, basic techniques of integration, an introduction to differential equations, and geometric series. Applications in business, management science and life science will be included with an emphasis on manipulative skills.

Course objectives

- To learn the basic definitions, concepts, rules, vocabulary, and mathematical notation of differential and integral calculus.
- To practice the necessary manipulative skills needed to solve problems involving differential and integral calculus.
- To provide a background in mathematics necessary to a study of university mathematics.

Learning outcomes

- Define basic concepts and notation of calculus
- Differentiate and integrate elementary functions
- Demonstrate the necessary skills required to solve problems in differential and integral calculus
- Use differential and integral calculus in solving applied problems

Grading

First Exam	21%
Second Exam	21%
Third Exam	21%
Final Exam	21%
Class Participation	16%
Total	100%

Class format: Class Hours 2 Lab hours 2

Course materials and textbooks:

- Tan, Applied Calculus for the Managerial, Life, and Social Sciences, Brooks/Cole, Pacific Grove, CA.

- Harshbarger and Reynolds, Mathematical Applications for the Management, Life, and Social Sciences, International Edition 10e,ISBN-13: 9781133108481 / ISBN-10: 1133108482.

Free and open Precalculus materials:
- Stitz and Zeager, (Basic and Intermediate Algebra, College Algebra, Precalculus), 3th edition, Lulu.com
- Math and Statistics Resource Guide is available here: http://infoguides.rit.edu/mathstat
  - Computer packages and/or graphing calculator Using spreadsheet – Excel and/or Graphing Calculator TI- 83/84 Plus

YEAR 2 – COURSE DESCRIPTIONS

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Computational Problem Solving in the Information Domain III

Course Description

The third course in the programming sequence expanding the student's knowledge base of higher level programming concepts including data structures, algorithm development and analysis, Big-O notation, directed graphs, priority queues, performance, and a greater understanding of how complex software can more easily be designed. Programming assignments are required.

Course Objectives

The purpose of this course is to advance the student's understanding of the use of data structures in designing a system and other programming related concepts. This includes algorithm development, proper application of data structures, software performance and a greater understanding of advanced programming algorithms are fundamental for developing more efficient software in less time.

Course Outline

- Intro to Data Structures and Algorithmic Complexities
- Number systems and Storing Numbers in Computers
- Memory Management
- Algorithm Analysis
- Performance / Efficiency
- Big-O notation
- Recursion
- Scaling applications
- Advanced Data Structures
- Linear Data Structures - Arrays, Strings, Stacks, Queues, Linked Lists
- Non-Linear Data Structures - Trees, Hash Tables, Heaps, Graphs
- Sorting and Searching Advanced Data Structures
- Producer / Consumer
- Study of Miscellaneous Algorithms

Grading

Exercises (homework and labs)	60%
Exams (theory and practical midterm and final)	40%
Total	100%

Class format:

Class hours 3, Lab hours 0

Course materials and textbooks:

None required.

RIT | Croatia

Designing the User Experience

Course Description

The user experience is an important design element in the development of interactive systems. This course presents the foundations of user-centered design principles within the context of human-computer interaction (HCI). Students will explore and practice HCI methods that span the development lifecycle from requirements analysis and creating the product/service vision through system prototyping and usability testing. Leading edge interface technologies are examined. Group-based exercises and design projects are required.

Course objectives

Requirements Analysis	Diffusion of Innovations
Research Methodologies	Design life cycles
Usability Goals	Cognitive Psychology
Personas	User Profiles
Task Analysis and decomposition	Heuristic Evaluations
Universal/Global/Accessibility/Assistive Technologies	Mobile/Pervasive
GUI design	Usability Testing

Learning outcomes

Upon Successful completion of this course the student will be able to:	Assessment Method
Analyze the usability of consumer products and determine barriers that interfere with product use	Written assignments, class exercises
Distinguish among the types of methods for gathering information for requirements.	Written Assignments, Exam and project
Analyze and interpret the data collected to develop appropriate requirements to be used in product design.	Projects and design document
Develop and use personas and task scenarios to formulate and write usability goals	In-class exercises, and projects
Iteratively design and prototype an interactive system.	In-class exercises, and projects
Perform and document a heuristic evaluation.	In class exercises and Written assignment.
Work effectively in small teams.	In Class Exercises and Group projects.
Communicate effectively – written, oral, listening, non-verbal cues. Assessed through written assignments and presentations.	In-class exercises, written assignments, and projects.

RIT | **Croatia**

Grading

Team Project (assessed at 3 intervals during the semester)	35%
Peer evaluations (assessed at 3 intervals)	10%
Final report documentation and presentation (presented and submitted during the Final Exam Period)	10%
Individual and Class Assignments (about 10 total)	30%
Video Assignment (1 assignment)	5%
Class readiness and participation	10%
Total	100%

Class format: Class hours 3 Lab hours 0

Course materials and textbooks:

- Norman, Donald. *The Design of Everyday Things*. NY: Currency and Doubleday, 2002. ISBN 0-385-26774-6 (May be available online)
- Saul Greenbert, Sheelagh Carpendale, Nicolai Marquardt, Bill Buxton. *Sketching the User Experiences: The workbook.* Morgan Kaufmann Publishers, 2011. ISBN 0-123-81959-8
- Jeff Johnson. *Designing with the mind in Mind.* Morgan Kaufmann Publixhers, 2ed. 2011. ISBN:0-124-07914-8

All other reading assignments will be available free at Books 24 x 7 through Wallace Library.

RIT | Croatia

Networking Essentials for Developers

Course Description

This is a course in the basics of network communication for software developers. Topics will include the OSI 7-layer model and its realization in the TCP/IP protocol stack. Students will also learn about naming and name resolution as it is used in the internet, plus the basics of routing and switching. The focus in all of this will be on an analysis of how name resolution, routing and switching operate from the developer's perspective. The specifics of how the socket transport layer appears to the programmer and operates will be a key topic. Finally, an overview of authentication mechanisms and number of examples of the security vulnerabilities of existing communication protocols will be provided to instruct students on the inherent risks of communication via the internet. (Pre-requisite: one year of programming in a high level language)

Course Objectives

This course will provide students with the network knowledge needed to develop and design software applications. At the end of the course, students should be conversant in:

- Network Communications
  - TCP/IP and OSI models
    - Why do we have them?
    - What are they used for?
    - What are the security implications?
  - Physical and Data link communications
    - How do I get data from point A to point B?
    - How do I know it is from this device?
    - How do I send it to everyone or a specific person?
  - Network and Transport Layers
    - What is an IP address?
    - What is DHCP and DNS? Why do we use it? How does it impact my coding?
    - How do we use it?
    - What is private versus public IP addresses?
    - What about firewalls and communications?
    - What are port numbers and sockets? How do I create code that allows for communication that is secure or direct?
  - Communications
    - How do I know how the data is being processed or communicating?
    - What affect does routing over multiple network topologies have on communications?

▪ How does on demand (client) versus server (passive listening) work when sending and receiving data?

Grading

Grading will be based on the quality of submitted work as follows:

Midterm Exam	25%
Final Exam	25%
Quizzes (5 each)	20%
Homework #1	15%
Homework #2	15%
Total	100%

Class format: Class hours 3 Lab hours 0

Course materials and textbooks:

Beasley, Jeffrey S. *Networking Essentials*. 3rd ed. Piyasat Nilkaew.

Writing Seminar

Course Description

This class is an intensive introduction to researched writing. Students will develop proficiency in analytical writing, critical reading and critical thinking, by writing within a variety of contexts and with a variety of purposes. Students will develop writing strategies and research skills that they will draw on throughout their academic careers. There will be particular attention to the writing process including an emphasis on teacher- student conferencing, self-assessment, class discussion, peer review, formal and informal writing, research and revision.

Course objectives

- to have students learn appropriate writing process strategies: pre-writing, composing and revising, editing, and consideration of audience and purpose
- to teach students to employ critical and creative thinking skills for self-assessment and reflection on the writing process
- to provide students with the appropriate grammatical and mechanical structures to support the development of their writing and to successfully express meaning
- to have students read advanced college-level texts for the purposes of discussion and composition
- to teach students to collaborate with peers and learn how to supply effective feedback
- to provide students with the skill for using a range of technologies to address different audiences

Learning outcomes

Students will:

- practice the appropriate writing process strategies: pre-writing, composing and revising, editing, and consideration of audience and purpose
- employ critical and creative thinking skills for self-assessment and reflection on the writing process
- apply the appropriate grammatical and mechanical structures to support the development of their writing and to successfully express meaning
- read advanced college-level texts for the purposes of discussion and composition
- collaborate with peers and learn how to supply effective feedback
- use a range of technologies to address different audiences

RIT | **Croatia**

Grading:

Literacy Narrative	10%
Online discussion posts (2@ 5 points each)	10%
Coming to terms paper	15%
Research proposal	5%
Annotated bibliography	10%
Research presentation	10%
Research paper	25%
Class participation	15%
Total	100%

Class format: Class hours 3 Lab hours 0

Literature

Lester, James D. *etal.Writing Research Papers: A CompleteGuide*. 14[th]ed. Pearson: 2012.

RIT | Croatia

Beginning Spanish I

Course description

This course introduces the Spanish language and the culture of Hispanic countries to beginners, and provides a basic foundation in all skills in Spanish (speaking, listening, reading, writing, culture) through intensive practice in a variety of media. Language work progresses from autobiographical information, through the present tense, to preliminary work in the past tenses. Students must take placement exam if this is their first RIT class in Spanish and they have some prior study of Spanish. Class 4, Credit 4 (F)

Course Objectives

The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in Spanishas it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations.

A second important aim of the course is to introduce students to contemporary life and culture in Spain and Spanish speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like there today.

Learning Outcomes

By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 Spanish words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in Spanish speaking countries.

Grading

The following categories will determine your grade:

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

RIT | **Croatia**

Course materials and textbooks:

- PLAZAS, Lugar de encuentros, Robert Hershberger, Susan Navey-Davis, Guiomar Borrás Álvarez, Fifth edition, CENGAGE Learning.
- PLAZAS, Lugar de encuentros, Student Activities Manual, fifth edition
- MindTap for Plazas, fifth edition, Cengage

Additional books:

- Keith Chambers; Beginner's Spanish Grammar; teach Yourself Books (or any other grammar of the Spanish language)

RIT | Croatia

Beginning German I

Course Description

This is the first course in a two-course sequence. The sequence provides students without prior exposure to the language with a sound basis for learning German as it is used today in its spoken and written forms. The goal of the sequence is proficiency in communication skills with an emphasis on oral proficiency. The sequence also acquaints students with contemporary culture and life in the German-speaking countries. Students must take a placement exam if this is their first RIT class in German and they have some prior study of German. Class 4, Credit 4 (F)

Course Objectives

The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in German as it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations.

A second important aim of the course is to introduce students to contemporary life and culture in German speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like there today.

Learning Outcomes

By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 German words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in German speaking countries.

Grading

The following categories will determine your grade:

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

RIT | **Croatia**

Course materials and textbooks:

- DEUTSCH HEUTE, INTRODUCTORY GERMAN, Tenth Edition, Moeller, Adolph, Hoecherl-Alden, Berger, Huth, Heinle, Cengage Learning
- DEUTSCH HEUTE, Premium Website
- DEUTSCH HEUTE, Student Activities Manual
- http://dict.tu-chemnitz.de/ (Beolingus-Your Online Dictionary)

http://dict.tu-chemnitz.de/ (Beolingus-Your Online Dictionary).

RIT | Croatia

Beginning Italian I

Course Description

This is the first course in a two-course sequence. The sequence provides students without prior exposure to the language with a sound basis for learning Italian as it is used today in its spoken and written forms. The goal of the sequence is proficiency in communication skills with an emphasis on oral proficiency. The sequence also acquaints students with contemporary culture and life in the Italian-speaking countries. Students must take placement exam if this is their first RIT class in Italian and they have some prior study of Italian. Class 4, Credit 4 (F)

Course Objectives

The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in Italian as it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations.

A second important aim of the course is to introduce students to contemporary life and culture in Italy and Italian speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like there today.

Learning Outcomes

By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 Italian words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in Italian speaking countries.

Grading

The following categories will determine your grade:

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

Course materials and textbooks:

- Oggi in Italia, a first course in Italian, by Merlonghi, Merlonghi, Tursi and O'Connor – Houghton Mifflin Company, 9thEdition, HEINLE CENGAGE Learning, 2012
- Oggi in Italia, Student Activities Manual, 9th edition, HeinleCengage Learning, 2012
- Oggi in Italia, Instructor's Resource Manual, 7th edition, HeinleCengage Learning, 2012

Additional course material:

- Progettoitaliano 1 – S. Magnelli, T. Marin – Edilingua
- Italian Grammar in Practice - Susanna Nocchi - Alma Edizioni Firenze
- Ecco! Grammaticaitaliana - Claudio Manella - Progetto Lingua Firenze
- Grammaticaessenzialedella lingua italiana – Marco Mezzadri - Guerra edizioni Perugia
- Cantachetipassa, impararel'italiano con le canzoni, Ciro Massimo Naddeo e GiulianaTrama,
- ALMA Edizioni, 2000
- Cinema italiano, imparal'italiano con i film, ALMA Edizioni, Firenze, a cura di Ciro Massimo Naddeo e Alessandro De Giuli, EdizioneRedux

RIT | Croatia

Beginning Russian I

Course Description

This is the first course in a two-course sequence. The sequence provides students without prior exposure to the language with a sound basis for learning Russian as it is used today in its spoken and written forms. The goal of the sequence is proficiency in communication skills with an emphasis on oral proficiency. The sequence also acquaints students with contemporary culture and life in the Russian-speaking countries. Students must take a placement exam if this is their first RIT class in Russian and they have some prior study of Russian. Class 4, Credit 4 (F)

Course Objectives

The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in Russian as it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations.

A second important aim of the course is to introduce students to contemporary life and culture in Russian speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like there today.

Learning Outcomes

By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 Russian words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in Russian speaking countries.

Grading

The following categories will determine your grade:

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

Course materials and textbooks:

- „Golosa" – A Basic Course in Russian by Richard Robin et al., fifth edition, Pearson
- „Golosa" –Student Activity Book
- „Golosa" – CDs

http://www.gwu.edu/~slavic/golosa/golosa.htm

RIT | Croatia

Beginning French I

Course description
This course introduces the French language and the culture of French speaking countries to beginners, and provides a basic foundation in all skills in French (speaking, listening, reading, writing, culture) through intensive practice in a variety of media. Language work progresses from autobiographical information, through the present tense, to preliminary work in the past tenses. Students must take placement exam if this is their first RIT class in French and they have some prior study of French. Class 4, Credit 4 (F)

Course Objectives
The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in French as it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations.
A second important aim of the course is to introduce students to contemporary life and culture in France and French speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like there today.

Learning Outcomes
By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 French words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in French speaking countries.

Grading
The following categories will determine your grade:

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

RIT | **Croatia**

Course materials and textbooks:

- Horizons, 6th edition by Manley, Smith, McMinn, and Prévost
- Horizons, Workbook/Lab Manual–available online via QUIA
- Text Audio CDs & Resources available through the Heinle Learning Center (iLrn)

Additional course material:

- Les 500 Exercices de phonétique A1/A2 – Hachette, 2009
- Nouvelle grammaire du français: Cours de Civilisation Française de la Sorbonne – Y. Dellatour, D. Jennepin, M. Léon-Dufour, B. Teyssier, Hachette, 2004

RIT | Croatia

Essential Study Techniques

Course description

This course begins in the second week of the semester. It is geared towards students who previously have not been successful in their courses due to poor study skills, time management and/or organizational skills. Students enrolled in this course will explore and practice essential study techniques and time management skills as they relate to the current credit courses in which students are enrolled. This course is not designed for students whose success deficiency is caused by lack of attendance.

Course Objectives

- To assist students in gaining a greater sense of awareness for personal habits related to time management, study skills.
- To expose students to time management and study skills tools that will improve their overall academic success.
- To assist students in gaining a greater understanding of key elements of academic success and learning.

Grading

This is a pass/fail course. Students will earn a passing grade by:

- Attending class
- Being prepared
- Participating

Class format:

Timetable: two class lectures per week for seven weeks (from Week #2 to Week #8), no labs.

Course materials and textbooks:

Study skills resources are available through the following links:

Academic Coaching
Math & Physics Support
Reading Support

ASC Schedules:

Study Centers

Other RIT Resources:

Wallace Library
Writing Commons
Tutor for Hire
Disability Services Office
I'm First

Software Design Principles and Patterns

Course Description

Quality software designs and architectures reflect software engineering principles that represent best contemporary practice. This course focuses on explicating these fundamental principles, examining a set of design and architecture patterns that embody the principles, and applying patterns appropriate to a design problem in a given context. Restricted to IST majors only.

Prerequisites: ISTE-240 or equivalent course. Co-requisite: ISTE-340 or equivalent course.

Course Objectives

Quality software designs and architectures reflect software engineering principles that represent best contemporary practice. This course focuses on explicating these fundamental principles, examining a set of design and architecture patterns that embody the principles, and applying patterns appropriate to a design problem in a given context. The course will cover several broad areas of software engineering. Among them:

- Software engineering design principles
- Software design patterns
- Implementation challenges

Learning Outcomes

By the end of this course, the student should be able to:

- Select and apply appropriate design patterns. Assessed by projects, exams.
- Analyze designs in terms of contemporary design principles. Assessed by homework, exams.
- Develop software within the context of architectural styles. Assessed by projects.
- Improve existing systems by refactoring in the context of patterns. Assessed by projects, exams.

Grading

Exam 1	15%
Exam 2	15%
Final Exam	20%
Activities	10%
Team Project - Phase 1	20%
Team Project - Phase 2	20%
Total	100%

Class format: Class hours 3 Lab hours 0

Course Materials and Textbooks

This course does not require any textbooks. All required readings will be from digital media and will be linked or posted on myCourses.

RIT | Croatia

Client Programming

Course Description

The goal of this course is to explore the issues involved in the design and implementation of client-side programming – both web and desktop application based. Topics include standards, browser and Document Object Model manipulation issues, design and deployment of both Web-based and desktop-based clients targeting multiple browsers, operating systems, and platforms. Use of specific Application Programming Interfaces and libraries where appropriate. The course will focus in the design, development, and implementation of usable, effective clients and client interfaces, both desktop and mobile, using multiple technologies.

This course will explore the analysis, design, development, and implementation of client-side programming in the context of Internet technologies, mobile devices, Web-based client systems and desktop applications. Students will learn to design and build usable and effective interactive systems, clients, and interfaces. Key features addressed will include browser and platform compatibility, object reusability, bandwidth and communications issues, development environments, privacy and security, and related technologies and APIs. Programming is required.

Prerequisites: ISTE-240 Web & Mobile II AND, ISTE-121 Computational Problem Solving in the Information Domain II OR equivalent courses

Grading

Attendance	5%
Assignment I - Interactive Form Elements with JS	15%
Assignment II - Using jQuery To Consume a Web Service	15%
Assignment III - Consuming a Web Service in C#	15%
Midterm Exam	25%
Final Exam	25%
Total	100%

Class format: Class hours 3 Lab hours 0

Course materials and textbooks: The following required texts will be available at the bookstore, or via online booksellers such as amazon.com and bn.com:

- JavaScript The Definitive Guide, 6th Ed. Flanagan, O'Reilly & Associates, ISBN: 0596805527
- JavaScript Essential Training via Wallace Library (online)

In addition to the text(s), online readings might be assigned in class.

Database Connectivity and Access

Course Description
In this course, students will build applications that interact with databases. Through programming exercises, students will work with multiple databases and programmatically invoke the advanced database processing operations that are integral to contemporary computing applications. Topics include the database drivers, the data layer, connectivity operations, security and integrity, and controlling database access.
Prerequisites: ISTE-120, ISTE-121, ISTE-230.

Course objectives
This course is part of the BS/IT core course offerings that provide fundamental IT skills. Specifically, this course covers foundation database connectivity content for multi-tier architectures.

Learning outcomes
- At the end of the successfully completed course students should be able to:
- Apply basic object-oriented programming (OOP) techniques in the development of database-driven applications; evaluated by course lab exercises and/or practicums.
- Implement fully functional database interfaces utilizing various data access APIs such as JDBC or ODBC, for single server, multi-server, and/or multi-client networks; evaluated by course lab exercises and/or practicums.
- Connect to, and issue queries against, different DBMSs; evaluated by course lab exercises, and/or practicums.
- Discuss and implement various standard data access techniques designed to improve DBMS connectivity and access performance; evaluated by in-class discussions, course lab exercises, written reports, practicums, and/or course examinations.
- Compare and contrast similarities and differences between various popular data access APIs, such as DAO, RDO, ADO, ODBC, JDBC, etc.; evaluated by in-class discussions, homework exercises, written reports, and/or course examinations.

Grading

Exercises	20%
Midterm Exams	30%
Final Exam	15%
Project	30%
In Class Participation	5%
Total	**100%**

Class format:
Class 3 hours, Lab 0 hours
Course materials and textbooks:
None required.

Foundations of Mobile Design

Course Description

This course is an introduction to designing, prototyping, and creating applications and Web Apps for mobile devices. These devices include a unique set of hardware and communications capabilities, incorporate novel interfaces, are location aware, and provide persistent connectivity. Topics covered include user interaction patterns, connectivity, interface design, software design patterns, and application architectures. Programming projects are required.

Prerequisite: ISTE-240.

Course objectives

As the percentage of people utilizing mobile devices in everyday life and to access Internet rapidly increases, specific design and implementation considerations need to be taken into account when developing applications and Web Apps for mobile devices. In this course, students will study various approaches and development environments for designing, prototyping, implementing, deploying and testing mobile device software. Advantages and disadvantages of each approach and environment will be discussed followed by hands-on student experience through projects, in-class and homework exercises. Particular attention will be paid to mobile interaction patterns and user interface design as well as to employment of APIs and cross-platform development tools.

Learning outcomes

At the successful completion of this course, the student will be able to:
- Differentiate between the design and capabilities of mobile application, web apps and desktop applications
- Utilize available development environments to design, code, test and deploy hybrid mobile applications
- Create effective mobile interfaces utilizing accepted interface conventions
- Create mobile applications utilizing multiple types of digital media
- Create mobile applications that consume web services, and post application data to a data store

Grading

Mid Semester Exam	15%
End of Semester Exam	15%
Homework Exercises (Small Apps)	50%
In-Class Exercises	20%
Total	100%

Class format: Class 3 hours, Lab 0 hours

Course materials and textbooks: None required.

Second Year Seminar

Course Description:
This course helps students prepare for co-operative employment ("co-op") by developing job search approaches and material. Students will explore current and emerging aspects of IST fields to help focus their skill development strategies. Students are introduced to the Office of Career Services and Co-op Education, and learn about their professional and ethical responsibilities for their co-op and subsequent professional experiences. Students will work collaboratively to build résumés, cover letters, and prepare for interviewing.

Course Outcomes – You will get the following:
- Your required co-op orientation
- A chance to hear from industry veterans and recruiters
- A thoroughly reviewed resume
- Knowledge of how to use various job search strategies through Handshake and other online search resources, e.g., Indeed and LinkedIn
- An understanding of co-op policies, student responsibilities, and the co-op evaluation process
- An exploration of advanced course concentrations and various opportunities to help you get the job you want

Course Expectations:
There will be 10 class sessions. Please turn off cell phones and be prepared to contribute to class discussions by reading the class syllabus in advance. Bring your questions and take advantage of getting the most from our guest speakers – they bring a wealth of information to help you succeed in your co-op experience.

Classroom Attendance:
We will allow only two absences. We will have makeup opportunities throughout the semester. It is the student's responsibility to reach out to the instructor for any absences.

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Grading:

Resume, First Draft	50 points
Resume, Final Draft	100 points
Micro Pitch/Presentation	Required
Attendance	Required
To Pass: Must earn at least 100 points, attend at least 8 classes, and present your Micro Pitch	

Class format: Class hours 1 Lab hours 0

RIT | Croatia

Beginning Spanish II

Course description

This course continues the basic grammatical structures, vocabulary and situations of first-year Spanish. Beginning Spanish 2 continues work in the past tenses and includes work on the subjunctive mood, plus the future and conditional tenses. Students work on paragraph-length speech and writing, and move toward readiness for conversation and composition. (MLSP-201 Beginning Spanish I or equivalent proficiency) Class 4, Credit 4 (S)

Course Objectives

The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in Spanish as it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations.

A second important aim of the course is to introduce students to contemporary life and culture in Spanish speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like in Spanish speaking countries today.

Learning Outcomes

By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 Spanish words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in Spanish speaking countries.

Grading

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

Course materials and textbooks:

- PLAZAS, Lugar de encuentros, Robert Hershberger, Susan Navey-Davis, Guiomar Borrás Álvarez, Fifth edition, CENGAGE Learning.
- PLAZAS, Lugar de encuentros, Student Activities Manual, fifth edition

- MindTap for Plazas, fifth edition, Cengage

Additional books: Keith Chambers; *Beginner's Spanish Grammar*, teach Yourself Books (or any other grammar of the Spanish language)

Beginning German II

Course Description
This is the second course in a two-course sequence. The sequence provides students without prior exposure to the language with a sound basis for learning German as it is used today in its spoken and written forms. The goal of the sequence is proficiency in communication skills with an emphasis on oral proficiency. The sequence also acquaints students with contemporary culture and life in the German-speaking countries. (MLGR-201 Beginning German I or equivalent; students must take the placement exam if this is their first RIT German class, and they have some prior study of German) Class 4, Credit 4 (S)

Course Objectives
The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in German as it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations. A second important aim of the course is to introduce students to contemporary life and culture in German speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like in German speaking countries today.

Learning Outcomes
By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 German words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in German speaking countries.

Grading

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

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Course materials and textbooks:
- DEUTSCH HEUTE, INTRODUCTORY GERMAN, Tenth Edition,
- Moeller, Adolph, Hoecherl-Alden, Berger, Heinle, Cengage Learning
- DEUTSCH HEUTE, Premium Website
- DEUTSCH HEUTE, Student Activities Manual

Additional books
Beginning Italian II

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Beginning Italian II

Course Description

This is the second course in a two-course sequence. The sequence provides students without prior exposure to the language with a sound basis for learning Italian as it is used today in its spoken and written forms. The goal of the sequence is proficiency in communication skills with an emphasis on oral proficiency. The sequence also acquaints students with contemporary culture and life in the Italian-speaking countries. (MLIT-201 Beginning Italian I or equivalent; students must take the placement exam if this is their first RIT Italian class, and they have some prior study of Italian) Class 4, Credit 4 (S)

Course Objectives

The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in Italian as it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations.

A second important aim of the course is to introduce students to contemporary life and culture in Italian speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like in Italy today.

Learning Outcomes

By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 Italian words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in Italian speaking countries.

Grading

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

Course materials and textbooks:

- Oggi in Italia, a first course in Italian, by Merlonghi, Merlonghi, Tursi and O'Connor – Houghton Mifflin Company, 9thEdition, HEINLE CENGAGE Learning, 2012
- Oggi in Italia, Student Activities Manual, 9th edition, HeinleCengage Learning, 2012
- Oggi in Italia, Instructor's Resource Manual, 7th edition, HeinleCengage Learning, 2012

Additional course material:

- Progettoitaliano 1 – S. Magnelli, T. Marin – Edilingua
- Italian Grammar in Practice - Susanna Nocchi - Alma Edizioni Firenze
- Ecco! Grammaticaitaliana - Claudio Manella - Progetto Lingua Firenze
- Grammaticaessenzialedella lingua italiana – Marco Mezzadri - Guerra edizioni Perugia
- Cantachetipassa, impararel'italiano con le canzoni, Ciro Massimo Naddeo e GiulianaTrama,
- ALMA Edizioni, 2000
- Cinema italiano, imparal'italiano con i film, ALMA Edizioni, Firenze, a cura di Ciro Massimo Naddeo e Alessandro De Giuli, EdizioneRedux

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Beginning Russian II

Course Description

This is the second course in a two-course sequence. The sequence provides students without prior exposure to the language with a sound basis for learning Russian as it is used today in its spoken and written forms. The goal of the sequence is proficiency in communication skills with an emphasis on oral proficiency. The sequence also acquaints students with contemporary culture and life in Russian-speaking countries. (MLRU-201 Beginning Russian I or equivalent; students must take the placement exam if this is their first RIT Russian class, and they have some prior study of Russian) Class 4, Credit 4 (S)

Course Objectives

The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in Russian as it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations.

A second important aim of the course is to introduce students to contemporary life and culture in Russian speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like in Russian speaking countries today.

Learning Outcomes

By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 Russian words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in Russia.

Grading

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

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Course materials and textbooks:

- „Golosa" – A Basic Course in Russian by Richard Robin et al., fifth edition, Pearson
- „Golosa" –Student Activity Book
- „Golosa" – CDs

http://www.gwu.edu/~slavic/golosa/golosa.htm

RIT | Croatia

Beginning French II

Course description

This is the second course in a two-course sequence. The sequence provides students without prior exposure to the language with a sound basis for learning French as it is used today in its spoken and written forms. The goal of the sequence is proficiency in communication skills with an emphasis on oral proficiency. The sequence also acquaints students with contemporary culture and life in French-speaking countries. (MLFR-201 Beginning French I or equivalent proficiency) Class 4, Credit 4 (S)

Course Objectives

The primary aim of this course is to provide students with a sound basis for learning to communicate effectively and accurately in French as it is spoken and written today. Practice is given in all four basic skills - listening, speaking, reading, and writing – with many opportunities for student-student interaction and self-expression in realistic situations.

A second important aim of the course is to introduce students to contemporary life and culture in French speaking countries. The dialogues, readings, and cultural notes have been written to depict what life is like in French speaking countries today.

Learning Outcomes

By the end of the course, students should be able to use with confidence the basic structures of the language, to have mastered an active vocabulary of approximately 1,200 French words and to recognize many more words in speech and writing. They should have mastered the basic features of the sound system and be able to communicate orally and in writing on everyday topics. Students should also have gained an appreciation for varied aspects of culture in French speaking countries.

Grading

Homework and/or Other Written Assignments	10 points
Quizzes (3 quizzes) (3 x 20)	60 points
Oral In-class Examination (2 x 5)	10 points
Final Oral Exam	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 2

RIT | Croatia

Course materials and textbooks:
- Horizons, 6th edition by Manley, Smith, McMinn, and Prévost
- Horizons, Workbook/Lab Manual–available online via QUIA
- Text Audio CDs & Resources available through the Heinle Learning Center (iLrn)

Additional course material:
- Les 500 Exercices de phonétique A1/A2 – Hachette, 2009
- Nouvelle grammaire du français: Cours de Civilisation Française de la Sorbonne – Y. Dellatour, D. Jennepin, M. Léon-Dufour, B. Teyssier, Hachette, 2004

YEAR 3 – COURSE DESCRIPTIONS

Server Programming

Course Description

This course provides in-depth work in server-side programming. Students will develop dynamic, data centric web pages and systems, and server-side information services that will be available to clients implemented in a variety of software technologies. Topics include XML parsing, generation, and consumption; web configuration and security; design patterns; web service structures, and application security. Programming projects are required.

Prerequisites: SWEN-383 and ISTE-340 or equivalent courses.

Course Objectives

Among others, following topics will be covered in this course:

- For creating web pages and systems:
    - Server-side programming
    - Database creation, access, and manipulation review
    - Libraries, building and using
    - XML parsing, generation and consumption
    - Configuration and security
    - GET, POST, PUT, DELETE processing
    - Patterns and architecture
    - Command line scripting
- For serving up data:
    - Basic RESTful service structure and construction
    - Mid Tier
    - Proxies
    - Business Layer Implementation
    - Service Layer Implementation
    - OOP PHP
    - Application security

Learning Outcomes

By the end of this course, the student should be able to:

- Describe and use web protocols
- Analyze server language strengths and weaknesses
- Build a medium-scale dynamic Web sites, applications and systems
- Use server-side technologies to consume disparate information systems
- User server-side technologies to create information systems that can be consumed by different clients and servers
- Use server-side languages to retrieve and update data from files, file structures, and databases.

Grading

Projects	40%
Exams	40%
Participation	10%
Exercises	10%
Total	100%

Class format: Class hours 3 Lab hours 0

Course Materials and Textbooks

This course does not require any textbooks. All required readings will be from digital media and will be linked or posted on myCourses.

RIT | Croatia

Application Development Practices

Course Description

In this course, students will gain experience with the processes, practices, and tools professional developers use to deliver robust and maintainable applications. Students will apply these practices and tools to build smaller-scale production-quality applications and systems. Topics include development life cycles, version control, test bed development and use, build utilities, error handling, deployment tools, and documentation.

Prerequisites: Completion of one of the following programming courses is required: ISTE-101, ISTE-121 or equivalent, ISTE-200, ISTE-202, IGME-102, IGME-106, 4080-223, 4080-231, CSCI-142, CSCI-242, CSCI-243, 4003-243 or 4003-334.

Course Objectives

Among others, following topics will be covered in this course:

- Development Methodologies, Diagramming Development
- Version Control
- Build Utilities, Testing
- Error Handling, Logging; Bug Tracking, Profiling
- Generic Code, Data-driven Code
- Reverse Engineering
- Efficient Code
- Application Deployment, Help Systems, Documentation

Learning Outcomes

By the end of this course, the student should be able to:

- Compare and contrast development methodologies.
- Describe and use techniques for error handling.
- Use appropriate tools to improve software development, performance, and deployment.
- Explain the concerns when designing software for maintenance.
- Develop documentation and functions to assist both developers and users.

Grading

In-Class Exercises	35%
Project Milestones	35%
Exams	25%
Attendance	5%
Total	100%

Class format: Class hours 3 Lab hours 0

Course Materials and Textbooks

This course does not require any textbooks. All required readings will be from digital media and will be linked or posted on myCourses.

Literature, Culture and Media

Course Description

Students will study literary and cultural texts selected from traditional literature to contemporary media and culture (including mythology, poetry, plays, novels, film, graphic novels, and digital literature). Students will analyze these texts from a variety of perspectives and become familiar with the history of debates about literature and/or culture as arenas of human experience.

Goals of the course

- to develop analytical skills through reading, discussion, and writing
- to develop critical thinking skills through close reading of literary texts, cultural artifacts, and critical/analytical essays on these subjects
- to introduce the skills, principles, and terminology of literary interpretation
- to gain an appreciation for the art and politics of literary and cultural representations
- to develop an awareness of the correlation between literary and cultural artifacts, and their social and cultural contexts
- to gain a broad understanding of genres—in literary, oral, aural, and visual media—as well as how these genres can interact with one another
- to become familiar with scholarly and popular debates over literary canons, critical analysis, and cultural studies

Learning outcomes

Students will:

- Consider the reasons that people read and write literature
- Consider the social and personal function of literature and other creative arts
- Experience reading as a sustained activity over a period of several months, with a peer cohort
- Develop English vocabulary
- Consider style of expression and the writer's craft
- Develop skills in close reading, note taking, and attention to textual detail
- Develop an understanding of the impact of authors' cultural and historical circumstances on their work
- Recognize connections between literature and life
- Use the RIT library electronic databases to search for contemporary short stories
- Practice their presentation and public speaking skills

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Grading

Weekly Online Reader Response Journals (3x8)	24%
Poetry test	18%
Short story test	18%
Student-led discussion on selected contemporary short story	10%
Test on student-selected stories and film	8%
Final creative essay	10%
Participation	12%
Total	100%

Class format: Class hours 3 Lab hours 0

Course materials and textbooks:

The Course Packet should be purchased at the RIT Croatia copy center. Older course packets are out of date and should not be used.

Additional required readings may be posted on *My Courses*. These readings will be announced by the professor. Students will be expected to download, print, read and save these texts.

Intermediate Spanish I

Course Description

This is the first course in the Intermediate Spanish sequence (second year). Intermediate Spanish I is a course in Conversation, along with grammar review and culture study. Emphasis is on tourist survival situation dialogues, various forms of conversation, grammar review, and both formal and informal culture (the arts and daily behavior). The basic skills learned in the first year courses are now put into practice. (MLSP-202 Beginning Spanish II or equivalent proficiency; students must take the placement exam if this is their first RIT Spanish class, and they have some prior study of Spanish) Class 3, Credit 3 (F)

Course Objectives

This course is designed to help students improve their vocabulary and better use their knowledge of the Spanish language. The primary goal of the course is to enable them to feel free to discuss various subjects/topics and express their own opinions freely, in Spanish.

Each lesson will cover one area (or one problem) of everyday life. Students will have to make a comparison between different realities: Spanish, their own view of it and their perspective of that situation in their own country. They will learn how to converse in Spanish and exchange their ideas freely. Students will master at least one grammar feature in each lesson in an applied way: they will have to immediately apply various grammatical structures in conversation or written/oral exercises.

In order to give students more opportunity to practice speaking, each of them will also participate in at least one (team-) project during the quarter and will have to make a presentation in Spanish on a chosen topic.

One of the most important objectives of the course is also to teach students how to write better in Spanish, and prepare them to use this language in their professional careers in the future. For this purpose students will have to write a short essay (a paragraph) every week. The theme of the paragraph can also be the theme of the in-class discussion. The instructor will also organize (when necessary, at least once in a semester) writing labs, where students will be correcting each other thus learning from each other's mistakes.

RIT | **Croatia**

Grading

Homework and/or Other Written Assignments	10 points
Grammar and Vocabulary Quizzes (3 x 15)	45 points
Debates	7 points
Course Project/Presentation	8 points
Final Oral Examination	10 points
Final Writing Exam (Essay)	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 1

Course materials and textbooks:
- Mundo 21, Fourth Edition, by Samaniego, Rojas, Rodriquez, De Alarcon, Heinle Cengage Learning
- Premium website for Mundo 21

Additional books
- Keith Chambers, Beginner's Spanish Grammar, Teach Yourself Books (ili neka druga španjolska gramatika).
- José Siles Artés: Historias para conversar – Nivel Medio; SGEL S. A. 2001.
- ¿Adónde? Conocer España y los países hispanohablantes, S. C. Ramírez, Elli, 2005.

An English-Spanish/Spanish-English dictionary is strongly recommended

Intermediate Italian I

Course Description

This is the first course of a two-course sequence at the intermediate level. The sequence provides students with the tools to increase their ability to function in Italian. Communicative activities, contemporary texts, and the study of vocabulary and grammar are used to expand all communication skills, especially oral proficiency. This sequence continues to address issues of contemporary Italian life and culture. (MLIT-202 Beginning Italian II or equivalent proficiency; students must take the placement exam if this is their first RIT Italian class, and they have some prior study of Italian) Class 3, Credit 3 (F)

Course Objectives

This course is designed to help students improve their vocabulary and better use their knowledge of the Italian language. The primary goal of the course is to enable them to feel free to discuss various subjects/topics and express their own opinions freely, in Italian.

Each lesson will cover one area (or one problem) of everyday life. Students will have to make a comparison between different realities: Italian, their own view of it and their perspective of that situation in their own country. They will learn how to converse in Italian and exchange their ideas freely. Students will master at least one grammar feature in each lesson in an applied way: they will have to immediately apply various grammatical structures in conversation or written/oral exercises.

One of the most important objectives of the course is also to teach students how to write better in Italian, and prepare them to use this language in their professional careers in the future. For this purpose students will have to write a short essay (a paragraph) every week. The theme of the paragraph can also be the theme of the in-class discussion.

Grading

Homework and/or Other Written Assignments	10 points
Grammar and Vocabulary Quizzes (3 x 15)	45 points
Debates	7 points
Course Project/Presentation	8 points
Final Oral Examination	10 points
Final Writing Exam (Essay)	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 1

RIT | **Croatia**

Course materials and textbooks:

- Bar Italia, by Annamaria Di Francesco e Ciro Massimo Naddeo
- Crescendo, An Intermediate Italian Program, second edition, by Francesca Italiano e Irene Marchegiani, Thomson and Heinle, 2nd edition, 2007
- Crescendo, Workbook/Lab Manual and Audio CDs

Additional Course Material:

- Giocare con la letteratura, by Carlo Guastalla, Alma Edizioni, Firenze.
- Ponti, italiano terzo millenio, 3rd editon, by Elissa Tognozzi e Giuseppe Cavatorta, Heinle Cengage Learning, 2013.
- Ponti, italiano terzo millenio, 2nd editon, Student Activities Manual, by Elissa Tognozzi e Giuseppe Cavatorta, Heinle Cengage Learning, 2013.
- Pro e contro 1/2, conversare e argomenatare in italiano, Pazit Barki e Pierangela Diadori, livello intermedio, libro dello studente, Bonacci editore, seconda edizione, Roma, 1999.
- Pro e contro, conversare e argomenatare in italiano, Pazit Barki e Pierangela Diadori, livello intermedio, guida per l'insegnante, Bonacci editore, seconda edizione, Roma, 1999.

RIT | Croatia

Intermediate German I

Course Description

This is the first course of a two-course sequence at the intermediate level. The sequence provides students with the tools to increase their ability to function in German. Communicative activities, contemporary texts, and the study of vocabulary and grammar are used to expand all communication skills, especially oral proficiency. This sequence continues to address issues of contemporary German life and culture. (MLGR-202 Beginning German II or equivalent proficiency; students must take the placement exam if this is their first RIT German class, and they have some prior study of German) Class 3, Credit 3 (F)

Course Objectives

This course is designed to help students improve their vocabulary and better use their knowledge of the German language. The primary goal of the course is to enable them to feel free to discuss various subjects/topics and express their own opinions freely, in German.

Each lesson will cover one area (or one problem) of everyday life. Students will have to make a comparison between different realities: German, their own view of it and their perspective of that situation in their own country. They will learn how to converse in German and exchange their ideas freely. Students will master at least one grammar feature in each lesson in an applied way: they will have to immediately apply various grammatical structures in conversation or written/oral exercises.

One of the most important objectives of the course is also to teach students how to write better in German, and prepare them to use this language in their professional careers in the future. For this purpose students will have to write a short essay (a paragraph) every week. The theme of the paragraph can also be the theme of the in-class discussion. The instructor will also organize (when necessary, at least once in a semester) writing labs, where students will be correcting each other thus learning from each other's mistakes.

Grading

Homework and/or Other Written Assignments	10 points
Grammar and Vocabulary Quizzes (3 x 15)	45 points
Debates	7 points
Course Project/Presentation	8 points
Final Oral Examination	10 points
Final Writing Exam (Essay)	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 1

Course materials and textbooks:

- KALEIDOSKOP Kultur, Literatur und Grammatik, Eighth Edition, Moeller, Mabee, Berger, Adolph
- KALEIDOSKOP, Student Activities Manual, Eighth Edition, Moeller, Mabee, Berger, Adolph
- KALEIDOSKOP, Eighth Edition, Premium Website

Additional books:

- Funk, H. Kuhn, C., Demme, S. (2006). Studio d A2 Deutsch alsFremdsprache, CornelsenVerlag, Berlin.
- Funk, H., Kuhn, C., Demme, S., Winzer, B. (2009). Studio d B1 Deutsch alsFremdsprache, CornelsenVerlag Berlin
- An English-German/German-English dictionary is strongly recommended

http://dict.tu-chemnitz.de/
http://wordreference.com/

RIT | Croatia

Intermediate French I

Course Description

This is the first course of a two-course sequence at the intermediate level. The sequence provides students with the tools to increase their ability to function in French. Communicative activities, contemporary texts, and the study of vocabulary and grammar are used to expand all communication skills, especially oral proficiency. This sequence continues to address issues of contemporary French life and culture. (MLFR-202 Beginning French II or equivalent proficiency) Class 3, Credit 3 (F)

Course objectives

This course is designed to help students improve their vocabulary and better use their knowledge of the French language. The primary goal of the course is to enable them to feel free to discuss various subjects/topics and express their own opinions freely, in French.

Each lesson will cover one area (or one problem) of everyday life. Students will have to make a comparison between different realities: French, their own view of it and their perspective of that situation in their own country. They will learn how to converse in French and exchange their ideas freely. Students will master at least one grammar feature in each lesson in an applied way: they will have to immediately apply various grammatical structures in conversation or written/oral exercises. In order to give students more opportunity to practice speaking, each of them will also participate in at least one (team-) project during the semester and will have to make a presentation in French on a chosen topic.

One of the most important objectives of the course is also to teach students how to write better in French, and prepare them to use this language in their professional careers in the future. For this purpose students will have to write a short essay (a paragraph) every week. The theme of the paragraph can also be the theme of the in-class discussion. The instructor will also organize (when necessary, at least once in a semester) writing labs, where students will be correcting each other thus learning from each other's mistakes.

Grading

Homework and/or Other Written Assignments	10 points
Grammar and Vocabulary Quizzes (3 x 15)	45 points
Debates	7 points
Course Project/Presentation	8 points
Final Oral Examination	10 points
Final Writing Exam (Essay)	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 1

Course materials and textbooks:
- Bravo!. Eight edition, Muyskens, Harlow, Vialet, Brière
- Bravo!, Student Activities Manual, , Muyskens, Harlow, Vialet, Brière

Additional books
- Les 500 Exercices de phonétique A1/A2 – Hachette, 2009
- Les 500 Exercices de grammaire A2-Hachette, 2006
- Nouvelle grammaire du français: Cours de Civilisation Française de la Sorbonne – Y. Dellatour, D. Jennepin, M. Léon-Dufour, B. Teyssier, Hachette, 2004
- Grammaire essentielle du français niveaux A1 A2 - Glaud Ludivine, Lannier Muriel, Loiseau Yves, Didier, 2015
- Edito 1 (méthode de français et cahier d'activités) – Marie-Pierre Baylocq Sassoubre, Stéphanie Brémaud, Stefano Campopiano, Clara Cheilan, Erwan Dambrine, Cécile Pinson, Didier, 2016
- Génération A2 (méthode de français) – P.Dauda, L.Giachino, C. Baracco, Didier, 2016

Global Economy and Grassroots

Course Description

Economic globalization has given birth to global, grassroots social movements. This course examines how global economic integration is brought about through multilateral institutions, multinational corporations, outsourcing, trade agreements, international lending, and neoliberal reforms. We consider impacts (cultural, economic, and health) of these trends on employees, farmers, small businesses, consumers, and the environment in the developed and developing worlds (with special emphasis on Latin America). We examine beliefs, alternative visions, and strategies of grassroots movements responding to these challenges.

Course objectives

- Examine key vectors of economic globalization
- Examine impacts (economic, environmental, social, and health) in different locales (with special emphasis on Latin America)
- Examine grassroots responses to perceived negative impacts, including the formation of social movements with alternative visions (alter-globalization)

Learning outcomes

Upon successful completion of this course, the students will be able to accomplish the following:

- Describe key vectors of economic globalization
- Describe various impacts of institutions and patterns in the global economy
- Describe and appraise the activities of grassroots movements responding to these challenges

The instructor will assess student success in achieving these outcomes via an appropriate selection of class discussions, written assignments, research projects, and exams.

Grading

First exam (in week 8)	25%
Second Exam (in week 15)	22%
In Class Discussions 13 x3	39%
Class participation	14%
Total	100%

Class format: Class hours 3 Lab hours 0

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Course materials and textbooks:

Below are sample texts from which appropriate chapters will be selected:

- Wallach, Lori, and Patrick Woodall, Whose Trade Organization?
- Hira, Ron, and Anil Hira, Outsourcing America
- Lappý, Frances Moore and Anna Lappý, Hope's Edge
- Pleyers, Geoffrey, and Alain Touraine, Alter-Globalization
- Dudley, Kathryn Marie, The End of the Line: Lost Jobs, New Lives in Postindustrial America
- Maeckelbergh, Marianne, The Will of the Many: How the Alterglobalisation Movement is Changing the Face of Democracy
- Moberg, Mark, and Sarah Lyon, Fair Trade and Social Justice: Global Ethnographies
- Thomas, Janet, The Battle in Seattle: The Story behind and beyond the WTO Demonstrations
- Iglesias Prieto, Norma, Beautiful Flowers of the Maquiladora
- Marcos, Subcomandante Insurgente, Our Word is Our Weapon: Selected Writings
- Barlow, Maude and Tony and Clarke, Global Showdown
- Ross, Andrew, ed., No Sweat
- Stiglitz, Joseph, Globalization and Its Discontents
- Hess, David L., Localist Movements in a Global Economy: Sustainability, Justice, and Urban Development in the United States

The main texts will be supplemented by other readings, more recent journal articles, and by films.

Documentary and feature films (video Presentations)

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Web Application Development

Course Description

When building larger-scale web applications, there are a myriad of concerns that range from technology, framework, and architecture selection to runtime performance optimization. This course focuses on the development of integrated web applications that consume information served from one or many sources. Trends in web application development are identified and assessed. Programming projects are required.

Prerequisites: ISTE-341 or equivalent courses

Course Objectives

Among others, following topics will be covered in this course:

- Principles of Client-Server distributed code in a web environment (protocols, languages, architectures)
- Client-side rendering environments (HTML5, SVG, proprietary technologies)
- Server-side development environments (PHP, Perl, content management system, application architectures)
- Dynamic generation of client-side code at the server
- Communication between client and server (GET and POST, AJAX, JSON)
- Each student will choose an advanced topic and present it

Learning Outcomes

By the end of this course, the student should be able to:

- Write applications which are browser and platform independent. Assessed by individual projects.
- Integrate client-server technologies by dynamically generating client-side code at the server that has the ability to manipulate the DOM on the client. Assessed by individual projects.
- Write programs and GUIs using technologies such as SVG, JavaScript, PHP, SQL and other scripting environments to gain competence with current and future practices. Assessed by individual projects.
- Research new technologies and techniques. Assessed by in-class presentations.

Grading

Exam on Web Application Security	20%
Assignment 1: Self-Guided Study	25%
Assignment 2: Multi-User Interactive Turn-Based Game	50%
In-Class Participation	5%
Total	100%

Class format: Class hours 3 Lab hours 0

Course Materials and Textbooks

- How to Break Web Software by Mike Andrews & James A. Whittaker. Addison-Wesley Professional, 2006. ISBN: 0321369440 (required)
- SVG Unleashed by Chris Lilley and Andrew Watt. Sams, 2002. ISBN: 0672324296 (recommended)
- SVG Programming by Kurt Cagle. Apress, 2002. ISBN: 1590590198 (recommended)

In addition to the books, online readings might be assigned in class.

Web Server Administration and Development

Course Description

Web developers often need to go beyond building Web pages and client-server programming to plan, install, configure, develop, and maintain the Web servers that host their sites. They need to understand issues of scalability, performance, and security as they apply to deploying a Web presence.

Course objectives and learning outcomes

This course provides a practical hands-on approach to development, configuration, and administration of Web server platforms. Topics include issues of and approaches to scalability, multiple server systems, security, and auditing, as well as the many configuration options, modules, and server alternatives available. By the end of the course, each student will be expected to:

- Understand the security and auditing aspects of web server programming
- Demonstrate the ability to install and analyze scalability and performance issues
- Install, configure, develop and maintain web servers

Grading

Attendance and Class Participation	10%
Tests	40% (20+20)
Group project	30%
Homework	20%
Total	100%

Class format: Class hours 3 Lab hours 0

Course materials and textbooks:

The following are sample texts, from which excerpts might be assigned:

- Linux Apache Web Server Administration (Linux Library)
- Run Your Own Web Server Using Linux & Apache

Additional material distributed in class and/or via MyCourses

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Ecology of the Dalmatian Coast

Course Description

This course is an introduction to population, community and ecosystem ecology, stressing the dynamic interrelationships of plant and animal communities of the Dalmatian Coast. The course includes such ecological concepts as energy flow and trophic levels in natural communities, population and community dynamics, biogeography and ecosystem ecology. Field trips to local ecosystems are included. Class 2, Lab 2, Credit 4 (S)

Goals of the course

- to explain and synthesize ecological concepts at the individual, population, community, and ecosystem level
- to learn about experimental design and local ecosystems
- to critically read scientific articles
- revise and improve written content

Learning Outcomes

- Identify, explain, and assess different viewpoints, pressures, and conflicts associated with environmental issues
- Develop analytical capabilities through field exercises
- Critically evaluate materials presented in class and during labs.
- Defend claims and solutions using evidence gathered from primary literature
- Identify how human actions impact the concept of sustainability and ways to minimize these impacts
- Demonstrate ability to work on a group assignment
- Improve communication skills

Grading

Attendance	15%
Research Paper	15%
Presentation	10%
Discussion paper	20%
Quiz 1	5%
Quiz 2	5%
Final Exam	30%
Total	100%

Class format: Class hours 2 Lab hours 2

Course materials and textbooks:

Brennan, S. and Withgott, J. Environment: The Science Behind the Stories. Pearson/Benjamin Cummings: San Francisco, CA.

Papers selected from the primary literature (updated annually)

RIT | Croatia

Foundations of Moral Philosophy

Course description

This course is a survey of foundational, and normative, approaches to ethics, understood as a systematic study into morality, and the moral questions regarding motivation. Topics will include virtue ethics, deontology, consequentialism, contractualism, evolutionary foundations of morality, and other approaches. Normative questions are questions about good and goodness, evil and badness, right and rightness, wrong and wrongness. Foundational approach to ethics deals with meta-ethical questions about the nature of morality and the sources of moral systems, their justifications etc. Ethics is a paradigmatic action-guiding discipline, i.e. it is about not only learning what something, i.e. an moral phenomenon, is, but also how to apply normative theories, make ethical decisions, justify ethical positions etc. Rather than a course in the history of ethics, this course serves as an introduction to the practice of ethical deliberations and discussions.

Course objectives

The focus of Foundations of Moral Philosophy is primarily not on finding dogmatic and definite answers on hard questions, but rather on a deep understanding of moral issues and dilemmas, formulating proper questions and understanding the method of answering them. The process of finding an answer enriches our intellectual imagination by evaluation of different possible options and diminishes the dogmatic assurance which closes the mind against speculation and critical approach to reality.

Learning outcomes

The main outcomes of this course are:

- to become skillful in understanding and interpreting various ethical positions;
- to become familiar with major philosophical ethical approaches and the methods of handling them in everyday life;
- to be able to adopt "philosophical attitude" as an elevated form of human curiosity and resistance to any kind of dogmatism.
- to evaluate and question one's own beliefs and values.

Grading

Class participation (active participation in class discussions and writing comments on class material)	16%
Two Exams	40%
Two Essays	30%
Attendance and participation	14%
Total	100%

Class format:
Class hours 3 Lab hours 0

Course materials and textbooks:
Possible resources (a narrower choice will be made according the availability of the material):
Meta-ethical theories:
- G. Graham, *Theories of Ethics*
- D. Brink, "Autonomy of Ethics"
- H. Sidgwick, *The Methods of Ethics*
- R. Shafer-Landau, *Fundamentals of Ethics*
- G. E. Moore, *Principia Ethica*

Different ethical positions
- Plato, *Republic, Euthyphro, Meno*
- Aristotle, *Nichomachean Ethics*
- D. Hume, *Treatise of Human Nature*
- J. Bentham, *An Introduction to the Principles of Morals and Legislation*
- I. Kant, *Groundwork of the Metaphysics of Morals*
- J. S. Mill, *Utilitarianism*
- F. Nietzsche, *On the Genealogy of Morals*
- J. Rawls, *A Theory of Justice*

Additional online sources:
- Stanford Encyclopedia of Philosophy
- RIT databases (Wallace Library)
- Films

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Intermediate German II

Course description

This is the second course of a two-course sequence at the intermediate level. The sequence provides students with the tools to increase their ability to function in German. Communicative activities, contemporary texts, the study of vocabulary and grammar are used to expand all communication skills, especially oral proficiency. This sequence continues to address issues of contemporary German life and culture. (MLGR-301 Intermediate German I or equivalent proficiency; students must take the placement exam if this is their first RIT German class, and they have some prior study of German) Class 3, Credit 3 (S)

Course objectives

This course is designed to help students improve their vocabulary and better use their knowledge of the German language. The primary goal of the course is to enable them to feel free to discuss various subjects/topics and express their own opinions freely, in German.

Each lesson will cover one area (or one problem) of everyday life. Students will have to make a comparison between different realities: German, their own view of it and their perspective of that situation in their own country. They will learn how to converse in German and exchange their ideas freely. Students will master at least one grammar feature in each lesson in an applied way: they will have to immediately apply various grammatical structures in conversation or written/oral exercises.

One of the most important objectives of the course is also to teach students how to write better in German, and prepare them to use this language in their professional careers in the future. For this purpose students will have to write a short essay (a paragraph) every week. The theme of the paragraph can also be the theme of the in-class discussion. The instructor will also organize (when necessary, at least once in a semester) writing labs, where students will be correcting each other thus learning from each other's mistakes.

Grading

Homework and/or Other Written Assignments	10 points
Grammar and Vocabulary Quizzes (3 x 15)	45 points
Debates	7 points
Course Project/Presentation	8 points
Final Oral Examination	10 points
Final Writing Exam (Essay)	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 1

RIT | **Croatia**

Course materials and textbooks:

- KALEIDOSKOP Kultur, Literatur und Grammatik, Eighth Edition, Moeller, Mabee, Berger, Adolph
- KALEIDOSKOP, Student Activities Manual, Eighth Edition, Moeller, Mabee, Berger, Adolph
- KALEIDOSKOP, Eighth Edition, Premium Website

Additional Course Material

- Funk, H. Kuhn, C., Demme, S. (2006). Studio d A2 Deutsch alsFremdsprache, CornelsenVerlag, Berlin.
- Funk, H., Kuhn, C., Demme, S., Winzer, B. (2009). Studio d B1 Deutsch alsFremdsprache, CornelsenVerlag Berlin.
- An English-German/German-English dictionary is strongly recommended

http://dict.tu-chemnitz.de/
http://wordreference.com/

Intermediate Italian II

Course Description

This is the second course of a two-course sequence at the intermediate level. The sequence provides students with the tools to increase their ability to function in Italian. Communicative activities, contemporary texts, and the study of vocabulary and grammar are used to expand all communication skills, especially oral proficiency. This sequence continues to address issues of contemporary Italian life and culture. (MLIT-301 Intermediate Italian I or equivalent proficiency; students must take the placement exam if this is their first RIT Italian class, and they have some prior study of Italian) Class 3, Credit 3 (S)

Course Objectives

This course is designed to help students improve their vocabulary and better use their knowledge of the Italian language. The primary goal of the course is to enable them to feel free to discuss various subjects/topics and express their own opinions freely, in Italian.

Each lesson will cover one area (or one problem) of everyday life. Students will have to make a comparison between different realities: Italian, their own view of it and their perspective of that situation in their own country. They will learn how to converse in Italian and exchange their ideas freely. Students will master at least one grammar feature in each lesson in an applied way: they will have to immediately apply various grammatical structures in conversation or written/oral exercises.

In order to give students more opportunity to practice speaking, each of them will also participate in at least one (team-) project during the quarter and will have to make a presentation in Italian on a chosen topic.

One of the most important objectives of the course is also to teach students how to write better in Italian, and prepare them to use this language in their professional careers in the future. For this purpose students will have to write a short essay (a paragraph) every week. The theme of the paragraph can also be the theme of the in-class discussion. The instructor will also organize (when necessary, at least once in a semester writing labs, where students will be correcting each other thus learning from each other's mistakes.

Grading

Homework and/or Other Written Assignments	10 points
Grammar and Vocabulary Quizzes (3 x 15)	45 points
Debates	7 points
Course Project/Presentation	8 points
Final Oral Examination	10 points
Final Writing Exam (Essay)	10 points
Class Absences and Class Participation	10 points
Total	100 points

RIT | **Croatia**

Class format: Class hours 2 Lab hours 1

Course materials and textbooks:
- Crescendo, An Intermediate Italian Program, second edition, by Francesca Italiano e Irene Marchegiani, Thomson and Heinle, 2nd edition, 2007.
- Crescendo, Workbook/Lab Manual and Audio CDs.
- Ponti, italiano terzo millenio, 3rd editon, by Elissa Tognozzi e Giuseppe Cavatorta, Heinle Cengage Learning, 2013.
- Ponti, italiano terzo millenio, 2nd editon, Student Activities Manual, by Elissa Tognozzi e Giuseppe Cavatorta, Heinle Cengage Learning, 2013.

Additional books:
- Giocare con la letteratura, by Carlo Guastalla, Alma Edizioni, Firenze.
- Pro e contro 1/2, conversare e argomenatare in italiano, Pazit Barki e Pierangela Diadori, livello intermedio, libro dello studente, Bonacci editore, seconda edizione, Roma, 1999.
- Pro e contro, conversare e argomenatare in italiano, Pazit Barki e Pierangela Diadori, livello intermedio, guida per l'insegnante, Bonacci editore, seconda edizione, Roma, 1999.

Intermediate Spanish II

Course Description

This is the second course in the Intermediate Spanish sequence (second year). Intermediate Spanish II is a composition course, emphasizing grammar re-view, composition, business-letter writing, Spanish for the Professions, and culture, while also including work in speaking and listening. The basic skills learned in the first year courses are now put into practice. In addition to the language work, there is significant work on cultural topics of Spanish-speaking countries at the intermediate level. (MLSP-301 Intermediate Spanish I or equivalent proficiency; students must take the placement exam if this is their first RIT Spanish class, and they have some prior study of Spanish) Class 3, Credit 3 (S)

Course Objectives

This course is designed to help students improve their vocabulary and better use their knowledge of the Spanish language. The primary goal of the course is to enable them to feel free to discuss various subjects/topics and express their own opinions freely, in Spanish.

Each lesson will cover one area (or one problem) of everyday life. Students will have to make a comparison between different realities: Spanish, their own view of it and their perspective of that situation in their own country. They will learn how to converse in Spanish and exchange their ideas freely. Students will master at least one grammar feature in each lesson in an applied way: they will have to immediately apply various grammatical structures in conversation or written/oral exercises.

In order to give students more opportunity to practice speaking, each of them will also participate in at least one (team-) project during the quarter and will have to make a presentation in Spanish on a chosen topic.

One of the most important objectives of the course is also to teach students how to write better in Spanish, and prepare them to use this language in their professional careers in the future. For this purpose students will have to write a short essay (a paragraph) every week. The theme of the paragraph can also be the theme of the in-class discussion. The instructor will also organize (when necessary, at least once in a semester) writing labs, where students will be correcting each other thus learning from each other's mistakes.

RIT | **Croatia**

Grading

Homework and/or Other Written Assignments	10 points
Grammar and Vocabulary Quizzes (3 x 15)	45 points
Debates	7 points
Course Project/Presentation	8 points
Final Oral Examination	10 points
Final Writing Exam (Essay)	10 points
Class Absences and Class Participation	10 points
Total	100 points

Class format: Class hours 2 Lab hours 1

Course materials and textbooks:
- Mundo 21, Fourth Edition, by Samaniego, Rojas, Rodriquez, De Alarcon, Heinle Cengage Learning
- Premium website for Mundo 21

Additional books:
- Keith Chambers, Beginner's Spanish Grammar, Teach Yourself Books (or any other grammar of the Spanish language).
- José Siles Artés: Historias para conversar – Nivel Medio; SGEL S.A. 2001.
- ¿Adónde? Conocer España y los países hispanohablantes, S.C. Ramírez, Elli, 2005.

An English-Spanish/Spanish-English dictionary is strongly recommended

Social and Cultural Theories

Course Description

The course deals with influential classical and contemporary theories of society and culture. During the course the student will evaluate the usefulness of different theories in addressing key, long-standing issues of human behavior, organization of society, nature of culture, relationships between individual and society, social control and conflict, social groups and stratification, fashion, cultural and social change and global intertwining. Theories serve to take a closer look at social and cultural phenomena and problems, such as violence, exploitation, modernity and globalization.

Course Objectives

Students will discuss the main questions about human societies and cultures that sociologists and anthropologists ask and try to answer. Students will apply influential sociological and anthropological theories in considering major contemporary social problems. Students will gain insight into common roots, mutual influences, and points of divergence between sociological and anthropological theories.

Learning outcomes

After completing the course, students will be able to: compare influential sociological and anthropological theories evaluate key theories regarding the usefulness of the same in elucidating contemporary social phenomena and problems explain the common theoretical roots of sociology and anthropology.

Grading

First exam	18%
Second exam	13%
Debate (14x3)	42%
Visual Sociology	12%
Participation in classes	15%
Total	100%

Class format: Class hour 3, exercises 0.

Course materials and textbooks:
- Tucker, Robert C. (ed.). The Marx/Engels Reader.
- Marx, K and Engels, F. Selected Works: Vol. 1.
- Weber, Max. Economy and Society: An Outline of Interpretive Sociology.
- Weber, Max. The Protestant Ethic and the Spirit of Capitalism.
- Gerth, Hans, and Mills, C. Wright,. From Max Weber: Essays in Sociology.
- Mills, C. Wright. The Sociological Imagination.
- Mills, C. Wright. The Power Elite.

- Durkheim, Émile. The Division of Labor in Society.
- Durkheim, Émile. Suicide.
- Durkheim, Émile. The Elementary Forms of Religious Life.
- Bourdieu, Pierre. Outline of a Theory of Practice.
- Foucault, Michel, and Paul Rabinow, eds. The Foucault Reader.
- Boas, Franz. Race, Language, and Culture.
- Malinowski, Bronislaw. Magic, Science, and Religion and Other Essays.
- Appadurai, Arjun. Disjuncture and Difference in the Global Cultural Economy.
- Geertz, Clifford. The Interpretation of Cultures.
- Lemert, Charles, and Ann Branaman, eds. The Goffman Reader.
- Wolf, Eric R. Europe and the People without History.
- Clifford, James. The Predicament of Culture.
- Giddens, Anthony. The Constitution of Society.
- Giddens, Anthony. Capitalism and Modern Social Theory.
- Said, Edward M. Orientalism.
- Fanon, Franz, Black Skin, White Masks.
- McGee, R. Jon. and Richard L. Warms, eds. Anthropological Theory: An Introductory History.
- Ortner, Sherry. Theory in Anthropology since the Sixties.
- Sacks, Karen Brodkin. Toward a Unified Theory of Class, Race, and Gender.
- Marcuse, Herbert. One-Dimensional Man.
- Jameson, Fredric. Postmodernism, or the Cultural Logic of Late Capitalism.
- Harvey, David. The Condition of Postmodernity.
- Mead, George H. Mind, Self and Society.
- McQuarie, Donald. Readings in Contemporary Sociological Theory.
- Kivisto, Peter. Illuminating Social Life: Classical and Contemporary Theory Revisited.
- Du Bois, W.E.B. The Souls of Black Folk.
- Merton, Robert. Social Theory and Social Structure.
- Vogel, Lise. Marxism and Socialist-Feminist Theory: A Decade of Debate.
- Berger, Peter and Thomas Luckmann. The Social Construction of Reality.
- Simmel, Georg. The Metropolis and Mental Life.
- Smith, Dorothy. The Conceptual Practices of Power: A Feminist Sociology of Knowledge.
- Wallerstein, Immanuel. The Modern World System.
- Allen, Kenneth. A Primer in Social and Sociological Theory.
- Appelrouth, Scott and Edles, Laura. Classical and Contemporary Sociological Theory: A Text and Readings.
- Coser, Lewis. Masters of Sociological Thought.
- Documentary and feature films (video presentations).

RIT | Croatia

YEAR 4 – COURSE DESCRIPTIONS

Mobile Applications Development I

Course Description

This course extends the material covered in the Foundations of Mobile Design course and provides students with experience writing native applications for mobile devices such as Smartphones in one of the current major platforms. These devices are exceptionally portable, have unique sets of hardware and communications capabilities, incorporate novel interfaces, are location aware, and provide persistent connectivity. Students are encouraged to make use of these unique characteristics and operating properties to develop innovative applications. Programming projects are required.

Prerequisites

ISTE-452 Foundations of Mobile Design, ISTE-340 Client Programming, or instructor permission

Course objectives and learning outcomes

The purpose of this course is to provide students with the experience of creating native applications for mobile phones. Topics covered include user interaction patterns, connectivity, interface design, software design patterns, and application architecture within the context of mobile computing.

Grading

Mini Project	20%
Weekly Homework	20%
Final Project	40%
Final Exam	20%
Total	100%

Class format: Class 3 hours, Lab 0 hours

Course materials and textbooks: None required.

Senior Development Project I

Course Description

The first course in a two-course, senior level, system development capstone project. Students form project teams and work with sponsors to define system requirements. Teams then create architectures and designs, and depending on the project, also may begin software development. Requirements elicitation and development practices introduced in prior coursework are reviewed, and additional methods and processes are introduced. Student teams are given considerable latitude in how they organize and conduct project work.

Course objectives

To learn all phases in project management with special emphasize on:
- Initiation phase
- Definition phase
- Design phase
- Development phase

Learning outcomes

- Students will learn the basic about delivering a prototype or 'proof of concept';
- Students will be oriented towards defining requirements and design limitations of project;
- Students will be faced with research and development phase as crucial in IT project;
- Students will master team reporting.

Grading

Use Case Documentation	25%
PM Documentation	30%
System Design Documentation	25%
Peer Review	10%
Participation	10%
Total	**100%**

Class format: Class hours 3; Lab hours 0

Course materials and textbooks:

- Scott Berkun; Making Things Happen: Mastering Project Management (Theory in Practice), Revised Edition; O'Reilly; 2008; ISBN-10: 0596517718
- Bob Hughes, Roger Ireland, Brian West, Norman Smith, David I. Shepherd; Project Management for IT-Related Projects; Second Edition; BCS, The Chartered Institute for IT;2012; ISBN: 9781780171180

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Scientific Inquiries in Environmental Science

Course description
This course is part of a two-semester sequence that when combined presents an integrated approach to the interrelated, interdisciplinary principles of environmental science through case studies, site visits, and field work. Through assigned readings, classroom discussion and case studies dealing with global environmental issues as well as the environmental issues related to the Dalmatian coast, students will learn how to critically analyze environmental problems from a multidisciplinary perspective and to propose solutions. (COS-ENVS-150**)** Class 3, Lab 2, Credit 4 (F)

Course objectives
This course will introduce students to interdisciplinary environmental problems with a focus on the underlying scientific principles surrounding the issues.
Students will learn problem solving techniques that integrate concepts and tools across disciplines and learn to conceptualize environmental problems from multiple perspectives.

Learning Outcomes
- Identify, explain, and assess different viewpoints, pressures, and conflicts associated with environmental issues
- Develop analytical capabilities through field exercises
- Critically evaluate materials presented in class and during labs
- Defend claims and solutions using evidence gathered from primary literature
- Identify how human actions impact the concept of sustainability and ways to minimize these impacts
- Demonstrate ability to work on a group assignment
- Improve communication skills

Grading
Exams, papers, group projects, class discussion, oral presentation

Class format: Class hours 2 Lab hours 2

Course materials and textbooks:
- Griffin, J.M. *Global Climate Change: the science, economics and politics.* The Bush School, College Station, TX
- Diamond, J. *Collapse: How Societies Choose to Fail or Survive*. Penguin Books, London, UK.

Mobile Applications Development II

Course Description

This course extends the Mobile Application Development I experience to medium-size form factor mobile devices such as slates and tablets. Compared to smartphones, these devices have much larger screen areas, and have the potentials for more processing power, higher capacity memories, additional sensors, and higher capacity batteries. Students are encouraged to make creative use of these increased display and computing resources to develop innovative applications. Programming projects are required.

Prerequisites

ISTE-252 Foundations of Mobile Design, ISTE-340 Client Programming, or instructor permission

Course objectives and learning outcomes

The purpose of this course is to provide students with the experience of creating native applications for mobile phones and tablets. Topics covered include user interaction patterns, connectivity, interface design, software design patterns, and application architecture within the context of mobile computing for mobile platform Android.

Grading

Homeworks	40%
Final Project	40%
Final Exam	20%
Total	100%

Class format: Class 3 hours, Lab 0 hours

Course materials and textbooks: None required.

Senior Development Project II

Course Description

The second course in a two-course, senior level, system development capstone project. Student teams complete development of their system project and package the software and documentation for deployment. Usability testing practices introduced in prior coursework are reviewed, and additional methods and processes are introduced. Teams present their developed system and discuss lessons learned at the completion of the course. This course is a capstone course for the Web and Mobile Computing program.

Course objectives

To learn all phases in project management with special emphasize on:

- Implementation phase;
- Follow-up phase.

Learning outcomes

- Students will be oriented towards construction of the actual project result;
- Students will produce software package;
- Students will master making documentation.

Grading

Status Reports	25%
Documentation	15%
Final Deliverable	30%
Peer Review	20%
Participation	10%
Total	100%

Class format: Class hours 3; Lab hours 0

Course materials and textbooks:

- Scott Berkun; Making Things Happen: Mastering Project Management (Theory in Practice), Revised Edition; O'Reilly; 2008; ISBN-10: 0596517718
- Bob Hughes, Roger Ireland, Brian West, Norman Smith, David I. Shepherd; Project Management for IT-Related Projects; Second Edition; BCS, The Chartered Institute for IT;2012; ISBN: 9781780171180

Sociology of Work

Course Description

This course analyses types and essential properties of postmodern work, its structure, the group processes involved in it, gender relationships, the influence of contemporary technology on new work arrangements, and its social meaning (work satisfaction, unemployment, and perspectives of work in the changing society). It treats work as emerging, like other social realities, out of social relationships between individuals and groups. It looks at ways in which people can develop a positive self-regard or feel a sense of alienation in their occupations or professions and various types of work organizations. Also considers leisure as a complement to work.

Course Objectives

By putting work into the context of other areas of social life, like economy, politics and family, or in relation to processes like social mobility, socialization and personal feelings, we will try to get insight into the main perspectives on the organization and consequences of work. Due to the fact that most of us spend our lives working for someone else, we will try to find answers to essential questions: Why and how we take on work roles? How organizational hierarchy influences our ambitions, feelings, self-esteem, family-life etc.? What are the benefits of team-work and of workers' unions? What kind of leisure are we capable of?

The course is designed to enable students to recognize and to understand new trends in shaping postmodern society by the economy sector in the society: more specifically, by the influence of division of labor, types of work, and the role of different institutions in shaping our lives. The students will be provided with necessary knowledge to be able to compare and analyze different work experiences from all over the world. Its aim is also to encourage students to discuss the impact of contemporary "work cultures and styles" on the quality of human living, customs, and relations as a whole. The issues concerning future of work and leisure in the contemporary world will give the students a solid framework to understand major social dimensions of the global society.

Learning Outcomes

Students will be able to:

- define and appropriately use key concepts concerning sociological perspectives of work and social research in general
- apply discipline-specific vocabulary in written or presentational assignments
- analyze, interpret and discuss texts concerning different aspects of work and it's relation to other areas of social life
- describe the processes governing development and evolution of concepts of work and leisure over time
- compare different sociological perspectives on work with different work experiences (their own or those of people close to them)

- discuss the impact of "work cultures and styles" on the quality of human living, customs, and relations as a whole
- analyze processes in working environments from multiple perspectives
- design and carry out small research project collecting and analyzing both qualitative and quantitative data by using appropriate methodology
- write sociological research papers based on original research.
- demonstrate the origins of their ideas by referencing sources used in their work
- formally present a paper based on original research in a polished, professional way

The instructor will assess student success in achieving these outcomes via an appropriate selection of class discussions, written assignments, research projects, and exams.

Grading

Four exams	20%
Essays	20%
Debate	20%
Project	20%
Class participation	20%
Ukupno	100%

Class format: Class hours 3 Lab hours 0

Course materials and textbooks:
- Below are sample texts from which appropriate chapters will be selected:
- Robbins, Richard, H.: *Global Problems and the Culture of Capitalism*, Allyn and Bacon, 2011.
- McCraw, Thomas, K.: *Creating Modern Capitalism*, Harvard University Press, 1997.
- Shaw, R.: *Reclaiming America*, University of California Press, 1999.
- Ritzer, G. *Globalization of Nothing,* Pine Forge Press, 2007.
- Stiglitz, Joseph, E.: *Globalization and its Discontents*, W.W.Norton & Company, 2003.
- Vago, Steven: *Social Change (5th edition)*, Prentice hall, 2003.
- Rubin, Beth: *Shifts in Social Contract*, Pine Forge Press, 1995.
- Rothman, Robert: *Working - Sociological Perspectives*, Prentice Hall, 1998.
- Honore, Carl: *In Praise of Slow*, New York 2004.
- Wheen, Francis: How Mumbo-Jumbo Conquered the World, Wheen Press, 2004.

Excerpts from:

Emile Durkheim

5.1.2 Karl Marx

5.1.3 Max Weber

5.1.4 Talcott Parsons

5.1.5 George Herbert Mead

5.1.6 Peter L. Berger and Thomas Luckmann

5.1.7 Antony Giddens

The main texts will be supplemented by other readings, more recent journal articles, and by films.
Documentary and feature films (video Presentations)

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Technical Writing

Course Description

In Introduction to Academic English, students increase their knowledge and control of grammatical structures in writing. This course focuses on the content, structure, and organization of sentences and paragraphs. Students will practice and improve their skills in the writing process, including prewriting, writing, revision, and editing techniques. Students will practice how to express meaning with grammatical clarity and mechanical accuracy in Standard Written English.

Assignments are designed to challenge students intellectually and to stimulate all language skills: writing, speaking, listening and reading. In-class activities will primarily aim to be communicative activities, and students will be using contemporary texts, while the study of vocabulary and grammar are used to expand all communication skills, especially oral proficiency and writing skills. Students will read, understand, interpret, and synthesize a variety of texts representing different cultural perspectives and/or academic disciplines.

Students will master syntax, grammar, punctuation, and spelling feature in an applied way: they will have to immediately apply various structures in conversation or written/oral exercises. Students will also practice to take notes from written texts and/or during lectures.

The instructor will also organize writing labs, where students will be correcting each other thus learning from each other's mistakes.

Learning Outcomes

Students will

- be able to use correct word order in a sentence,
- be able to use the right collocations,
- be able to use idioms appropriately,
- be able to use basic tenses to write about past, present, and future events,
- be able to apply punctuation and capitalization rules,
- be able to write simple and compound sentences,
- be able to write short and clear paragraphs,
- be able to understand a variety of shorter texts,
- be able to distinguish the properties of academic style from less formal styles,
- be able to draft and revise their writing,
- understand the importance of academic honesty,
- receive feedback from their peers and give feedback to their peers
- improve their vocabulary and spelling.

Grading

Assignment 1: Audience-Based Resume and Cover	10%
Assignment 2: Defining a Term for Two Distinct Audiences	10%
Midterm: Project Proposal	15%
Assignment 3: Progress Report (Survey/Interview Questions for Final Project)	5%
Assignment 4: Instructions	10%
Assignment 5: Project Presentation/Oral Report	10%
Assignment 6: Final Project/Final Report	25%
Homework: Out and in-class activities, draft workshops, participation and professionalism	15%
Total	100%

Class format: Class hours 3; Lab hours 0

Course materials and textbooks:

- Lannon, John M. and Laura J. Gurak. Technical Communication. 12th ed. New York: Longman, 2011.
- Reep, Diana C. Technical Writing. Principles, Strategies and Readings. 4th ed. Needham Heights: Allyn & Bacon, a Pearson Education Company, 2000.
- Gurak, Laura, and Lannon John. M. A Concise Guide to Technical Communication. 3rd ed. Pearson Education, Inc., 2007.
- Hybels, Saundra and Weaver, Richard L. Communicating Effectively. 10th ed. New York: McGraw-Hill, 2012.