SYLLABUS

Classification	*Elective*	***Course No.***	***11610***	***Cr.Hrs.***	***3:0:3***	***Instructor***	*KiseonKim. Yang XIAO*
Course Title	***Korean***	통신신호처리					
	English	***Communication Signal Processing***					

Course Outline
This course covers several issues in LDPC codec, which will be very useful for further communications engineering system. In this course an effort will be made to impart an understanding of LDPC codec system, design of LDPC codes, LDPC encoder, LDPC decoder, which are the key blocks to realize a LDPC codec system.

Prerequisite	*The learned courses for graduates: Error Correct Coding*
Textbook and References	***Text**: **Robert H. Morelos-Zaragoza,** The Art of Error Correcting Coding, 2002 John Wiley & Sons Ltd* ***References**: The recent papers on LDPC codec.* ***Lecture Hours**: Every Mon/Wed, 16:00-18:00 Hours* ***Office Hours**: Every Friday 16:00~17:30 PM (Office:).* ***Grading**: One Middle Exam (45%), and one Final Exam (55%)*

Weekly Course Schedule		
Calendar	***Description***	***Remarks***
1st week	*Introduction* *Hamming. Golay and Reed-Muller codes*	*6 hours*
2nd week	*Binary cyclic codes and BCH codes*	*6 hours*
3rd week	*Binaryconvolutionalcodes*	*6 hours*
4th week	*Soft-decisiondecoding* *Middle Exam*	*6 hours*
5th week	*Iteratively decodable codes*	*6 hours*
6th week	*Construction of good LDPC codes* *LDPC encoding*	*6 hours*
7th week	*LDPC decoding algorithms*	*6 hours*
8th week	*Evaluation of LDPC codes* *Final Exam*	*6 hours*

*** If there will be experiments, mark it in the "Remarks".**

Coordinator Kiseon Kim (Seal)

Yang Xiao

Dept. Chair Jong Won Kim (Seal)

SYLLABUS

Classification	Elective	Course No.	~~11610~~ 11634	Cr. Hrs.	3:0:3	Instructor	Yang Xiao
Course Title	Korean	무선통신					
	English	Wireless Communication					

Course Outline

This course focuses on basic topics of wireless communications such as following:

- Introduction to indoor/outdoor wireless communications systems
- Characterization of indoor/outdoor radio propagation in UHF band
- Fundamentals on operations of cellular systems
- Multiple access techniques

and also on advanced topics involved with:

- Smart antenna systems
- OFDM systems
- Ultra WideBand multiple access systems

Grading is based on

- midterm/final exams(50%, 25% each)
- term project(50%)

Term project topics will be assigned early in the course to each student on the basis of student's research background.

Prerequisite	None
Textbook and References	Textbook(T.S.Rappaport, Wireless Communications: Principles and Practice, Prentice Hall), Handouts, related papers in the literature

Weekly Course Schedule

Calendar	Description	Remarks
1st week	Introduction to indoor/outdoor communication systems Characterization of indoor/outdoor radio propagation in UHF band / Discussions on term project	6 hours
2nd week	Characterization of indoor/outdoor radio propagation in UHF band Fundamentals on operations of cellular systems	6 hours
3rd week	Fundamentals on operations of cellular systems Multiple access techniques : FDMA, TDMA, and CDMA	6 hours
4th week	Multiple access techniques : other protocols / Intermediate reporting on termproject Midterm Exam	6 hours
5th week	Smart antenna systems : Fundamentals Smart antenna systems : Advanced theories	6 hours
6th week	OFDM systems : Fundamentals OFDM systems : Advanced theories	6 hours
7th week	Ultra WideBand Multiple access systems : Fundamentals Ultra WideBand Multiple access systems : Adv. theories	6 hours
8th week	Final reporting on termproject Final Exam	6 hours

* If there will be experiments, mark it in the "Remarks".

Coordinator **Yang Xiao** Yang Xiao

Dept. Chair **Jong Won Kim** (seal)

SYLLABUS

Classification	Elective	Course No.	11628	Cr. Hrs.	3:0:3	Instructor	AFTAB AHMAD
Course Title	Korean	암호학과 컴퓨터 보안					
	English	Cryptography and Computer Security					

Course Outline

In this course data and network security is discussed in the context of layered network architecture. Problems, such as measurability of security, security protocol interfaces and security at the gateways are highlighted as research topics. Example security protocols at link layer, IP layer and transport layer are discussed in detail with digital signature infrastructure. Various components of secure communications from anti-jamming systems to mutual authentication are discussed.

Prerequisite	Undergraduate level Discrete Mathematics
Textbook and References	Lecture notes

Weekly Course Schedule

Calendar	Description	Remarks
1st week	***Protecting your networking system: Reliability, Privacy, Security*** *The differences between various types of data and network protections are discussed, such as reliability, privacy and security. How each one is measured and remedied is also discussed.* ***Taxonomy of security*** *The paraphernalia of security is sorted out by classifying it into attack types, vulnerability types, various measures. Differences between various terms used in security context are explained, e.g., the difference between an encryption algorithm and encryption protocol, a key and a password etc.*	6 hours
2nd week	***Components of security*** *Various subsystems of a secure network and how each can be implemented in general. Authentication, mutual authentication, authorization, data confidentiality, data integrity, replay protection, key generation and distribution system. Difference between operating system security, network security and layer security is elucidated.* ***Authentication and mutual authentication*** *Server-based and peer-to-peer authentication with various network scenarios. The examples of EAP, IEEE 802.1X, RADIUS are used as protocols. IEEE 802.11-2007 is the protocol in focus.*	6 hours
3rd week	***Authorization versus authentication*** *The difference between authentication and authorization becomes especially critical in privacy circumstances, such as medical environment. A detailed implementation and design discussion is included. 3G cellular network example of virtual home environment (VHE) is used as example.* ***Data integrity*** *Algorithms and protocols for data integrity are discussed. Hash and password-based Hash and its use in digital signatures is given detailed discussion. The topic is again discussed in conjunction with transport layer security later. SHA-1 and MD5 are used as examples.*	6 hours

4th week	***Data encryption*** *Encryption algorithms, their types (block, stream), significance of random numbers in encryption, testing for good random number generators. Examples of AES as block algorithm and f8 as stream algorithm is used.* ***Midterm Exam***	*6 hours*
5th week	***Key generation and management*** *The mathematical background for two-key (public/private) algorithms is explored. Protocols for general exchange and distribution. Algorithms for key generation. IPSEC, and IEEE 802.11-2007 are used as examples.* ***Physical layer security and anti-jamming systems*** *How data can be corrupted through jamming. Interference rejection mechanisms to combat jamming. A comparison of various spread spectrum and OFDM systems as anti-jamming systems.*	*6 hours*
6th week	***MAC and link layer security*** *Requirements for MAC sublayer security, vulnerabilities and solutions. IEEE 802.11-2007 and IEEE 802.15.4-2006 MAC layers will be used as example. The security level concept of IEEE 802.15.4-2006 gets special attention due to its potential application to other protocols.* ***Network layer security*** *Securing a packet during end-to-end routing. A detailed discussion on IPSEC, its strengths, weaknesses, missing links and implementation will be carried out.*	*6 hours*
7th week	***Transport layer security and digital certificates*** *Why transport layer security needed even if lower layers are secure, SSL/TSL, digital certificate, nonrepudiation, digital signature, certificate authority, certificate revocation list. Relation between transport layer and IP layer security.* ***Open Issues – measuring security, automating security, per-transaction security, security protocol interfaces.*** *These issues and why they are hard to investigate. How the world would be like if they are resolved.*	*6 hours*
8th week	***Future solutions: Inter-network security architectures*** *Solution to the unsolved problems will be explored from a theoretical and implementation point of views.* ***Final Exam***	*6 hours*

*** If there will be experiments, mark it in the "Remarks".**

Coordinator **Aftab Ahmad** I)

Dept. Chair **Jong Won Kim** Seal

SYLLABUS

Classification	*Elective*	***Course No.***	*15410*	***Cr. Hrs.***	*2:0:2*	***Instructor***	*U.S. Tiwary*
Course Title	***Korean***	신호처리공학 특론 Ⅱ *(부제: 스마트 이미징 시스템 &센서 네트워크)*					
	English	*Special Topics on Signal Processing &Systems II* *(Subtitle: Smart Imaging System and Sensor Network)*					

Course Outline

In this lecture series different type of sensor for imaging and their network will be discussed. Pros and cons of different sensor will be addressed. Basic architecture for sensor network, data fusion method, and information assessment with decision making algorithm will be discussed.

Prerequisite	*Basics of Digital Signal Processing, Image Processing, Networking, Sensor, Data Fusion.*
Textbook and References	*Lecture notes*

Weekly Course Schedule

Calendar	***Description***	***Remarks***
1st week	***Smart Imaging System:*** Basic architecture of smart imaging systems, Fundamentals of enhancement, de-blurring and restoration of images, Modeling of noise in images, Noise distortions in Passive Millimeter Wave Imaging System.	8 Hours
2nd week	***Smart Imaging System:*** Noise and distortions in Infrared Imaging System, Data fusion for smart imaging system, Techniques in smart imaging system, Method for information assessment and decision making.	8 Hours
3rd week	***Wireless Sensor Network:*** Basic architecture and technical challenges of sensor networks, Communication protocols of sensor networks, Routing techniques in sensor networks, Data gathering and data fusion in sensor networks.	8 Hours
4th week	***Wireless Sensor Network:*** Object tracking in wireless sensor networks, Distributed sensor network, Self organizing Sensor network, and Energy optimization in wireless sensor network.	8 Hours

Coordinator ***Uma shanker Tiwary*** **(seal)**

Dept. Chair **Wang,** ***Se-Myung*** **(seal)**

SYLLABUS

Classification	*Elective*	***Course No.***	*15411*	***Cr. Hrs.***	*2:0:2*	***Instructor***	*AFTAB AHMAD*
Course Title	***Korean***	*컴퓨터 과학 및 공학 특론 II*					
	English	*Special Topics on Computer Science and Engineering II: Body Area Network*					

Course Outline

The purpose of this course is to introduce the medical environment specific characteristics of wireless networking. These networks are used for patient monitoring, emergency room, operating room, post-operative recovery room and patient care outside the clinic. An array of sensor technologies, bioprocessing, software and hardware development for sensor networks is discussed at great length. Each student is trained to specialize in one of the topics by doing a term paper that must include relevant literature search and student's own contributing ideas.

Prerequisite	*Digital Communications ore Wireless Networks*
Textbook and References	*Body Sensor Networks; Authors: M. Yacoub and Gwang-Zhong Yang; publisher: Springer*

Weekly Course Schedule

Calendar	*Description*	*Remarks*
1st week	***Introduction to wireless sensor networks and patient monitoring environment – Chapter 1*** *In this lecture, we will discuss various scenarios for patient monitoring in hospitals and nursing homes. Followed by this discussion, we will evaluate the required characteristics of a body sensor network for such an environment.* ***Biosensor design and interfacing – Chapter 2*** *How biosensors work and are interfaced to collect data will be discussed this week. Working of potentiometric devices will be explored.*	*4 hours*
2nd week	***Protein engineering for biosensors – Chapter 3*** *Electrochemical, optical, gravimetric sensors will be discussed. Various modules for protein engineering will also be discussed.* ***Introduction to wireless communications – Chapter 4*** *The topics discussed include hardware for wireless communications. For example, various types of circuits for RF communications.*	*4 hours*
3rd week	***Network topologies, protocol architectures and standards – Chapter 5*** *This topic includes network architectures in health care. Major focus is on IEEE 802.15.4, LP-WPAN. Network deployment aspects are also discussed.* ***Power management in sensor networks – Chapter 6*** *Architectures for inertial energy scavenging, and module design and simulation. Power electronics trade off from a design point of view will be discussed.*	*4 hours*
4th week	***Ultra-low-power, bio-inspired processing – Chapter 7*** *This lecture will be on bio-inspired signal processing. A discussion on digital signal processing will be presented. CMOS-based biosensors will be used as examples for processing.* ***Midterm Exam***	*4 hours*

5th week	***Multisensor fusion – Chapter 8*** *Various topics on multi-sensor fusion, including direct data fusion, feature-level fusion, with various features. Discussions on dimensionality reduction and feature selection will be included.* ***Context-aware sensing – Chapter 9*** *Various application scenarios will be discussed with respect to information granularity, signal variations, and data normalization. Context-recognition techniques and spatio-temporal self-organizing maps (STSOMs) will be discussed.*	*4 hours*
6th week	***Autonomic sensing – Chapter 10*** *Autonomic sensing, belief networks, will be among the topics discussed. Treatment of routing, self-organization, security and self-protection will be included.* ***Sensor microsystem design – Chapter 11*** *Applications for wireless capsule devices for human and animal medicine will be discussed. Electronic system design aspects will get in-depth attention.*	*4 hours*
7th week	***Hardware programming and software development for sensor networks*** *Embedded systems programming paradigm will be discussed. Processor's relation with main memory, I/O and other peripherals is included. Different tools for microcontroller programming will be discussed.* ***Operating systems for small devices*** *uC, TinyOS, and microFramework will be discussed. In week 6 and 7 some lab exercises may be carried out.*	*4 hours*
8th week	***Future direction: Quantum computing and its impact on sensor networks*** *Sensor miniaturization, where it stands now and where it's heading. Nano-materials and nano-films. Processor miniaturization, such as through quantum computing will be discussed and their effect on future of sensor technology* ***Final Exam***	*4 hours*

*** If there will be experiments, mark it in the "Remarks".**

Coordinator **Aftab Ahmad**

Dept. Chair **Jong Won Kim**

(seal)

SYLLABUS

Classification	Elective	Course No.	15416	Cr. Hrs.	2:0:2	Instructor	Volodymyr V. Lysak
Course Title	Korean	광공학 특론 II					
	English	Special Topics on Photonics & Optics II : Microcavity enhanced photonics devices: Theory, fabrication and characterization					

Course Outline

The purpose of this course is to introduce the specific characteristics and main physical effects of microcavity devicse such as Vertical cavity surface emiting lasers (VCSELs), resonant cavity enhanced photodiodes (RCEPDs) and resonant cavity light emiting diodes (RCLEDs).
The basic physical processes, fabrication methods and characterization of such devices will be considered in detail. Students will make some experimental work measuring the main characteristics of devices. Each student is trained to specialize in one of the topics by doing a term paper that must include relevant literature search and student's own contributing ideas.

Prerequisite	
Textbook and References	*Vertical-cavity surface-emitting laser devices/ ed. by H.E.Li, K.Iga. (Springer series in photonics; v.6), 2003, 385p.* *Vertical-cavity surface-emitting lasers. Design, fabrication, characterization and applications/ ed. by C.W.Wilmsen, H.Temkin, L.A.Coldren, Cambridge Press, 1999, 455p.* *Vertical-cavity surface-emitting lasers: Technology and applications/ ed. by J.Cheng and N.K.Dutta, (Optoelectronic properties of semiconductors and superlattices; v.10), 2000, 323p.* *J. Piprek, Semiconductor optoelectronic devices. Introduction to physics and simulation/ Academic Press, 2003, 279p.* *Physics of optoelectronic devices/ ed. by S.L.Chuang, (Wiley series in pure and applied optics), 1995, 717p.* *Semiconductor lasers/ G.P.Agrawal and N.K.Dutta. -2nd ed., 1993, 616p.*

Weekly Course Schedule

Calendar	Description	Remarks
1st week	**Introduction to VCSEL** • Structures • Integration: photonics and optoelectronics	4 hours
2nd week	**Physics of the gain medium in VCSEL** • Semi-classical laser theory • Band structure calculations • Threshold properties	4 hours
3rd week	**Operating principles of VCSEL** • Basic properties • Emission characteristics • Dynamic and noise behavior • Optical interconnects	4 hours
4th week	**Gain and polarization properties of VCSEL** • Valence band anisotropy • Polarization control	4 hours
5th week	**VCSEL simulation models** • Optical phenomena • Electrical phenomena • Thermal phenomena	4 hours
6th week	**Cavity and mirror design of VCSEL** **VCSEL applications:** • Long-wavelength InP-based devices • Mid-wavelength GaAs structures • Visible light GaN microcavity devices	4 hours

7th week	*Fabrication and characterization of VCSELs* *Resonant cavity light emitting diodes*	*4 hours*
8th week	*Resonant cavity enhanced photodiodes* *Final Exam*	*4 hours*

*** If there will be experiments, mark it in the "Remarks".**

Coordinator **Volodymyr V. Lysak (seal)**

Dept. Chair **Jong Won Kim** (seal)

SYLLABUS

Classification	Elective	*Course No.*	15417	*Cr. Hrs.*	2:0:2	*Instructor*	J. H. Jang
Course Title	*Korean*	반도체 및 전파공학 특론 II : 메타물질 및 응용					
	English	Special Topics on Semiconductor Optoelectronics & Microwave Electronics II: Metamaterials and their Applications					

Course Outline

Theoretical aspects of metamaterials in microwave and millimeter wave frequencies and their realizations based on transmission lines will be discussed Various applications of metamaterials on antenna and guided/radiated wave systems will be covered and engineering design will be carried out based on the solid theoretical backround covered in the lectures.

Prerequisite	Electromagnetics, Microwave Devices and Network
Textbook and References	1. C. Caloz and T. Itoh, 'Electromagnetic Metamaterials: Transmission Line Theory and Microwave Applications,' 2006 John Wiley & Sons 2. N. Engheta and R. W. Ziolkowsky, 'Metamaterials (Physics and Engineering Explorations),' 2006 John Wiley & Sons

Weekly Course Schedule

Calendar	*Description*	*Remarks*
1st week	Introduction of Metamaterials (MTMs) and Left-Handed (LH) MTMs	
	Theoretical approaches of LH MTMs, I	
2nd week	Theoretical approaches of LH MTMs, II	
	Composite Right/Left-Handed Transmission Lines (CRLH TLs)	
3rd week	Balanced/Unbalanced Resonances and Lossy CRLH TLs	
	LC Network Implementation, I: Filter Characteristics of CRLH TLs	
4th week	Mid-Term Exam.	
	LC Network Implementation, II: Backward Propagation Characteristics of CRLH TLs	
5th week	LC Network Implementation, III: Dispersion Characteristics of CRLH TLs	
	Two Dimentional MTMs, I: Eigenvalue Problem and Periodic 2D Structure	
6th week	Two Dimentional MTMs, II: Transmission Matrix Method (TMM) and TLM Modeling	
	Two Dimentional MTMs, III: Negative Refractive Index (NRI) Effects	
7th week	Guided-Wave Applications	
	Radiated-Wave Applications	
8th week	The Future of MTMs	
	Final Exam.	

** If there will be experiments, mark it in the "Remarks".*

Coordinator **Jae-Hyung Jang** (seal)

Dept. Chair **JongWon Kim** (seal)

Center for International Students and Scholars

Gwangju Institute of Science and Technology (GIST)

English I: Writing and Grammar Syllabus

Summer 2008 (July-August)

General Information:

Instructor: Colin Wetmore

Office Phone: 062) 970-2068

Email cwetmore@gist.ac.kr

Fax: 062) 970-2099

Section: EIW-A

Location: Monday-Thursday, 10:00am-12:00pm, LG Library 3rd Floor, Classroom C

Course Description:

This course will provide instruction and practice in academic and business writing skills. Students will learn to recognize and use patterns of organization commonly used in academic writing. Students will also develop skills of appropriate business communication, specifically email and job applications. This course follows an 'integrated skills' approach to expose learners to authentic models of English (ie listening and reading texts) as an essential stage in the writing process. Students will engage in all stages of the writing process ie planning, drafting, revising and final submission.

Course Objectives:

By the end of the course, students will demonstrate an ability to:

- effectively communicate their ideas and opinions in appropriate academic style
- understand and use the basic structures of essay writing
- engage in the process of writing a formal paper (ie submission, editing and revision)

Course Assessment

You will be assessed in this class based on the results of your official assignments and final project. In class conduct and performance will also be taken into account. Homework assignments will not affect your final grade, but all homework assignments must be done to satisfaction.

Academic Policy:

As per GIST academic policy, the minimum requirements for passing English I are as follows:

1. Full class participation and completion of all homework assignments.
2. Decent English performance: Majority of Skills scores 4 or higher, none less than 3.5.
3. Meet minimum attendance requirements as set by your instructor.

Course Schedule:

- ◊ Students are expected to be prepared for daily class activities.
- ◊ Contact Course Instructor if absences are expected so assigned work can be completed.
- ◊ Schedule subject to change as required.

Week	Date	Topics Covered
1	7.1	Get to know you; Orientation
	7.2	Previous learning experience; Expectations
	7.3	E-mail communication assignment instruction
2	7.7	Integrated skills: Preparation for "Problem solving" **Assignment due**
	7.8	Integrated skills: Writing task "Problem solving"
	7.9	Features of a paragraph: Topic sentences & organization
	7.10	Features of a paragraph: content and organization
3	7.14	Grammar: Review & Instructions **Assignment due**
	7.15	Listening & Note-taking: Writing summaries
	7.16	Reading and Note-taking: Writing summaries
	7.17	Expanding: Using support with coherence
4	7.21	Job application / Skills vocabulary **Assignment due**
	7.22	Instruction: CV writing
	7.23	Instruction: Cover letter writing
	7.24	Writing Styles: formal, informal, business, academic
5	7.28	Organization & Patterns of writing **Assignment due**
	7.29	Assignment Development: "Personality Comparisons" Introduction
	7.30	Assignment Development: "Personality Comparisons" Preparation
	7.31	Assignment Development: "Personality Comparisons" Preparation
6	8.4	In-class writing **Assignment due**
	8.5	**In-class writing: Final Assessment**
	8.6	Results, feedback and consultation
	8.7	Results, feedback and consultation
7	8.11	Results, feedback and consultation

Center for International Students and Scholars

Gwangju Institute of Science and Technology (GIST)

English I: Speaking and Listening Syllabus

Summer 2008 (July-August)

General Information:

Instructor: Colin Wetmore

Office Phone: 062) 970-2068

Email cwetmore@gist.ac.kr

Fax: 062) 970-2099

Section: EIW-A

Location: Monday-Thursday, 1:00pm-3:00pm, LG Library 3rd Floor, Classroom C

Course Description:

This course covers areas pertaining to personal communication and presentation skills. Students will participate in small group discussions on topics of general interest as well as activities that require them to explain factual information. Effective speech presentation techniques are dealt with, including those involving formal feedback. A rapid overview of the English vowel and consonant sound systems and selected features of phrasing, stress, rhythm, and intonation will be covered. Methods pertaining to the improvement of note-taking and summarizing skills will be the focus of writing tasks given in this course.

Course Objectives:

By the end of the course, students will demonstrate an ability to:

- effectively communicate their ideas and opinions concerning varying topics.
- demonstrate the effective use of voice, posture and visual aids in a presentation.

Course Requirements:

Communication Skills	50 %
Presentation Skills	30 %
Listening & Note-taking Skills	20 %

Academic Policy:

As per GIST academic policy, the minimum requirements for passing English I are as follows:

1. Full class participation and completion of all homework assignments.
2. Decent English performance: Majority of Skills scores 4 or higher, none less than 3.5.
3. Meet minimum attendance requirements as set by your instructor.

Text:

English I Speaking & Listening: Fall, 2007 original text to be purchased.

◊ Additional materials will be distributed to students as required.

Course Schedule:

◊ Students are expected to be prepared for daily class activities.

◊ Contact Course Instructor if absences are expected so assigned work can be completed.

◊ Schedule subject to change as required.

Week	Date	Topics Covered
1	7.1	Get to know you; Orientation
	7.2	Previous learning experience; Expectations
	7.3	Understanding Communication: Talking vs Communication
2	7.7	Questioning Skills; Opinion Language: Agree & Disagree
	7.8	Presentation Basics: Articulation, Body posture, Confidence, Visual Aids
	7.9	Introduction to Listening, Listening Practice
	7.10	Egg-drop Competition
3	7.14	Language Organization: Lists, Sequences, Cause & Effect
	7.15	'Phobias': Listening for Main Idea, Notetaking & Summarizing
	7.16	'Phobias': Listening for Specific Information & Presentation Preparation
	7.17	'Phobias': Presentations **(Oral Presentation – Phobia)**
4	7.21	Cross-cultural Communication: Critical Incidents
	7.22	Cross-cultural Communication: Translations & Interpretations
	7.23	'Why': Adding reasons &Giving support to arguments
	7.24	'Why': Supporting your position **(Oral Presentation – Why?)**
5	7.28	Final Task: Recruiting (Gwangju)/Listening Practice
	7.29	Final Task: Recruiting (GIST)/Listening Practice
	7.30	Final Task: Recruiting (Research) **(Poster Presentations – Research)**
	7.31	Listening Assessment **(Listening Assessment)**
6	8.4	Recruiting Presentation **(Oral Presentation – Recruiting)**
	8.5	Assessment review
	8.6	Results, feedback and consultations
	8.7	Results, feedback and consultations
7	8.11	Results, feedback and consultations

Center for International Students and Scholars

Gwangju Institute of Science and Technology (GIST)

English II Academic Writing Syllabus

General Information:

Instructor:	John D. McDonald
Office Phone:	062) 970-2065
Email:	McDonald@gist.ac.kr
Fax:	062) 970-2099

Course Description:

The class deals with using your own materials as much as possible, to prepare short texts of the following types: problem solution, general-specific, process description, and data commentary as well as article summary and critique. In the second half of the course, students will write a "research paper", work-in-progress, for example, a literature review, a draft introductory chapter to a thesis or dissertation, or a draft of an article they are preparing for publication.

Course Objectives

The purpose of this course is to improve students' academic writing skills for the purpose of publication of thesis and journal articles in their specific fields.

Evaluation

Short papers are assigned each week and students are expected to rewrite in response to editing comments. Students are expected to complete all required assignments (**as noted below**) and be prepared to participate in class discussions.

Academic Policy:

As per GIST academic policy, the minimum requirements for passing English are as follows:

1. Full class participation and completion of all homework assignments
2. Decent English performance
3. Minimum (for any reason) of 32 hours/semester of class attendance

CISS will strictly enforce the regulations specified above. Therefore, please do not skip your language classes. Specifically, students who are in their final semester of an MS program miss English classes quite often due to job training or official business trips. In order to avoid a regrettable situation that your graduation is delayed for one more semester due to an unsatisfactory language course, it is strongly recommend that complete all language requirements before your final semester or face the consequences of non-attendance. **Please note that every absence of a student academically affects the class activities and wastes the time of each and every classmate.**

Text:

English II Academic Writing: Fall, 2007 to be purchased.

* Supplementary materials to be provided as needed or posted on the website.

Weekly Plan: (*Subject to change as required)

This course is designed in such a way that students will be given ample opportunity to bring their own materials to class for discussion. Typically, the second class of each week will be dedicated to revising students' work, either as a group, or individually. **Being prepared for class is essential to the successful completion of this course. There will be weekly reading assignments pertaining to topics to be covered in class.**

Week	Date	Topics Covered
1	7.1	Orientation, Introductions, Expectations
	7.2	Formal Emails: Politeness, Errors
	7.3	Task: Formal Email & Writing sample
2	7.7	Guide to Science Writing; Word choice
	7.8	Sentence Writing
	7.9	Writing practice **(Bring Samples)**
	7.10	General-Specific Texts
3	7.14	Problem-Solution Texts
	7.15	Writing practice **(Bring Samples)**
	7.16	Summary Writing
	7.17	Mid-session Assessment **Mid-session Assessment**
4	7.21	Research Paper (RP) Construction: Introduction
	7.22	Writing practice **(Bring Samples)**
	7.23	RP Construction: Methods
	7.24	RP Construction: Data Commentary
5	7.28	Writing practice **(Bring Samples)**
	7.29	RP Construction: Results/Discussion/Conclusion I
	7.30	RP Construction: Results/Discussion/Conclusion II
	7.31	Writing practice **(Bring Samples)**
6	8.4	RP Construction: Titles/Abstracts
	8.5	Final Project Preparation: Consultations
	8.6	Final Assessment **Final Assessment**
	8.7	Results, feedback and consultation
7	8.11	Results, feedback and consultation

***All lecture topics refer to titles in the 'Table of Contents' in the assigned text.**