# **BAHIR DAR UNIVERSITY**



# INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

# A CURRICULUM FOR THE DEGREE OF BACHELOR OF SCIENCE (BSc) IN DISASTER RISK MANAGEMENT AND SUSTAINABLE DEVELOPMENT

MAY, 2020

**BAHIR DAR, Ethiopia** 

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# DEPARTMENT OF DISASTER RISK MANAGEMENT AND SUSTAINABLE DEVELOPMENT

# INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

#### **BAHIR DAR UNIVERSITY**

[This draft document is a revised curriculum for Bachelor Degree in "Disaster Risk Management and Sustainable Development" under the Department of Disaster Risk Management and Sustainable Development in the Institute of Disaster Risk Management and Food Security Studies submitted to Bahir Dar University for discussion, amendments and approval. This revised curriculum is prepared with a due consideration of the general directions from MoSHE particularly following the changes in the standard period of study (from three to four academic years with 8 semesters) for a bachelor degree programs.]

MAY, 2020

**BAHIR DAR** 

#### **EXECUTIVE SUMMARY**

Name of the Degree Program: Disaster Risk Management and Sustainable Development

Name of the Degree to be awarded: Bachelor of Science in Disaster Risk Management and Sustainable Development in Amharic as: የሳይንስ ባችለር ዲግሪ በአደጋ መከላከልና ዘላቂ ልማት

Degree to be awarded by: Bahir Dar University, Subjected to the Approval of the Senate

Standard Period of Study: 4 Academic Years with 8 Semesters

**Commencement of the Program: Each year in September starting from 2020/2021** 

Fees / Charges:

**Cost-sharing** 

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### 1. Background of the Program

Like most developing economies, Ethiopia is found to be vulnerable to a wide range of environmental problems. Drought and flood represent major challenges, but a number of other hazards affect communities and livelihoods. These include: frost and hail, crop pests and diseases, livestock diseases, human diseases, conflict, landslides, earthquakes and urban and forest fires. Climate change is predicted to further increase exposure to climate-related and hydrological hazards and given the overall economic importance of agriculture and its vulnerability to climate variability, the livelihood of poor households and the scarce diffusion of irrigation and water-shed management practices make Ethiopia particularly vulnerable.

Capacity to effectively prevent, mitigate, prepare for and respond to disaster risks triggered by these hazards require knowledge, skills, motivation and resources that includes training, education, policy support, and systemic accountability. Legislative framework on disaster management in Ethiopia started since the 1973/74 famine. By identifying the key gaps, the National Policy on Disaster Prevention and Management provides an opportunity for the integration of disaster risk management and sustainable development initiatives in higher education and research institutions. However there remains the gap in addressing the professionalization and capacity development challenges of the DRM workforce.

As a response for the identified gap, Bahir Dar University has established "The Department of Disaster Risk Management and Sustainable Development (DRMS)" in 2005. Given the disaster risk management context of Ethiopia, the need for a revision arises from systematic analysis of stakeholders' feedback. The feedback came from various stakeholders in different time and place including workshops that have been prepared by the department of disaster risk management and sustainable development. The feedback containing the critique and recommendation has been sourced from members of the training community as well as government and non-government organizations. The feedbacks provided by stakeholders and training community includes:- redundancy of course contents; dichotomization of courses that could be one and exclusion of necessary and inclusion of unnecessary courses for the program. Most importantly, substantial revision was undertaken by the department considering current and emerging disaster risk challenges of the globe in general and Ethiopia in particular

### 2. Rationale of the Program

Ethiopia, like other countries in Sub-Saharan Africa is prone to disaster risks of natural and anthropogenic origin. Common disasters in recent years include famine, diseases, environmental degradation and conflicts, which have disproportionately affected most vulnerable groups such as women, children, elderly and the disabled members of society. This program is developed in response to the ongoing need to building disaster resilient communities through strengthening capacity to prevent, plan and respond to disasters within the sustainable development framework. The program is designed to fill a widely sought after but sparsely provided focus at undergraduate level. Using multi-disciplinary approach, the program seeks to produce competent professionals who are equipped with both academic and practical knowledge and skills in managing all the phases of the disaster cycle. Whilst the program deals with topics at a local level, topics of international relevance are also covered to ensure graduates are able to fit at both local and international levels.

### 3. Rationale for Revision

There are various reasons to review the current curriculum. First, the implementation of new educational road map of the country changes the current three-year study period of the degree programs into a four-year degree programs to enable universities to provide basic and general courses in the freshman academic year. Second, the dynamism of the disaster risk management issues in the country changes over the last 10 years (for instance: DRM policy was ratified in 2013and resulting growing need of improving emergency preparedness and response capabilities of the existing DRM workforce in Ethiopia, as well as the growing interest of city governments in managing urban risks, etc). Third, the recent tracer study involving DRM graduates of 12 African universities, including Bahir Dar University, documented evidences that confirm strong work-force traction for DRM graduates across Africa, include high employment prospects and placements across diverse fields. Significantly, considerable numbers of graduates have taken up government positions at (sub) national or local scales in a wide range of ministries and government departments. This new employment patterns necessitates the need to revise the current curriculum so that our graduates offer a high value skill-set that is "fit-for-purpose" for multiple fields and sectors.

Moreover, at Macro level there is huge shifts with regard to policies strategies to bring about sustainable development at the country which is being witnessed in many critical successes. Growth and Transformation plan (GTP) and Climate-Resilient Green Economy (CRGE) and others are some

of the policy shifts we need to in line with at large. The recent International Conference held in Sendai, Japan has formulated a new framework for Disaster Risk Reduction (SFDRR) which has superseded the Hyogo Framework for Action (HFA) and other new Global Frameworks & DRR related initiatives (SD Goals, Paris Agreement, Urban Agendas) are another reasons to do so.

Upon this understanding of new developments, in terms of employment patterns and policy changes at global and national levels including the new direction taken up by MoSHE, the department decides to revise the existing curriculum.

## 4. Philosophy of the Program

The philosophical standpoint regarding the nature of disaster risks s and its management has evolved over time. This can be seen in the view of the two dominant perspectives- 'Disasters as acts of nature' vs 'Disasters as acts of man'. The first perspective views disasters as the characteristics of **natural hazards** and often focuses on scientific weather forecasting and engineering solutions to the management of disaster risks. However, the second perspective views disasters as unanswered questions of development and tend to focus on reducing disaster risks developmentally. This approach placed the importance of **human vulnerability** as the key drive of disaster related loss in the forefront. As a result, Hazards research and vulnerability research traditions, dominated by physical and social sciences respectively, born out of these two opposing perspectives.

However, critics on this two opposing views of disasters leads to the development of newly emerging paradigm that tries to perceive hazards and disasters as two sides of the same coin where neither can be fully understood from the view point of either physical science or social science alone. Rather this recent view reemphasizes **the mutual interactions between nature and society**.

Therefore, our revised curriculum is primarily informed by this newly emerging paradigm that views disasters as a serious disruption resulted from the interaction between nature and society. This makes the program a trans-disciplinary field involving integration of knowledge from various disciplines. The revised curriculum enables the would-be graduates to offer a high value skill-set that is "fit-for-purpose" for multiple fields and sectors.

# 5. Goal of the Program

The overall goal of this undergraduate program is to produce high quality graduates acquainted with knowledge, skills and attitudes that could contribute for effective disaster risk management in a sustainable manner to build a disaster resilient society.

# 6. Objectives of the Program

Specifically, the program seeks to:

- Produce e qualified graduates with the required knowledge and skills to practice disaster risk management in a sustainable manner.
- Foster an informed and critical attitude towards theoretical and applied aspects of disaster risk management and sustainable development.
- Develop knowledge and skills required to improve livelihood and food security status of the society.
- Produce graduates who could facilitate DRM mainstreaming into various development sector activities.
- Produce qualified graduates with the required capacity of research design and analytical skills related to disaster risk and development
- Produce qualified graduates with effective coordination, communication and facilitation knowledge and skills related to disaster risk management.

# 7. Professional Profile

The program consists of a blend of academic knowledge and skills-based disciplines to produce well equipped expertise in disaster risk management and sustainable development that are expected to serve as professionals in a wider spectrum of areas related to the management of disaster risks. A professional in Disaster Risk Management and Sustainable Development is expected to perform the following tasks listed under eight career path ways:

				Tasks			
Career path ways/	1	2	3	4	5	6	7
Duty							
DRM	Organize	Perform	Formulate	Coordinate	mobilize	Develop	Monitor,
<b>Expert/Practitioner</b>	participatory	hazard,	comprehensive	DRM activities	resources for	performance	evaluate
	CBDRM	vulnerability	DRR/CCA	with	DRM activities	indicators for	implementation
		& capacity	plan; develop	stakeholders;		DRM activities	of DRM
		assessments	Contingency				activities
			plans				
Community	Identify	Perform		Organize	Identify	Disseminate	Mobilized
Facilitator	vulnerable and	community-		communities to	challenges and	DRR related	community-
	marginalized	based social	-	implement	unmet needs of	information to	based
	groups	and resource	-	DRR plans;	vulnerable	communities;	institutions
		mapping;		mobilize	groups among	organize	during
		collect		community	risk prone	community	emergencies
		information		resources	communities	experience	
		related to				sharing	
C 0 4 90		DRR					
Safety officer	Identify safety	Identify	-	Develop safety	Coordinate	Monitor and	Conduct
	risks in different	requirement	•	management	implementation	supervise	accident
	contexts	for safety	maps	plan	of safety	availability and	investigation
		equipment			measures; find	functionality of	and

		and signs			resources for safety activities	safety equipment and signs	communicate investigation report
EIA/SIA expert	Conduct environmental & social impact assessment	Develop environmental strategic impact assessment	Perform environmental auditing	Coordinate monitoring & evaluation of environmental impact assessment performances	Review Environmental Impact Assessment Documents		L
Public Health Emergency Expert	Describe the epidemiology of public health problems in emergency settings	Identify key public health intervention strategies in emergency settings	Coordinate epidemic investigation& management	Communicate public health risk information with concerned stakeholders			
Livelihood and food security expert	Identify potential livelihoods options in different contexts	Conduct livelihood and food security assessments	Develop plan for livelihood diversification and income generation	Coordinate implementation of Livelihood & food security activities with different stakeholders	Monitor and evaluate livelihood and food security program activities		
Researcher	Identify action research problem	Organize action research team	Identify resources	Undertake action research	Write report and disseminate findings of action research		
Teacher/trainer	Develop syllabus	Prepare training materials	Prepare teaching aids	Conduct seminar, workshops	Facilitate field practice	Evaluate students' performance	

# 8. Graduate Profile

A graduate profile in disaster risk management and sustainable development Program is expected to:

#### Knowledge

- Describe concepts and definitions related to disaster risk management and sustainable development.
- Explain principles, standards and frameworks in disaster risk management and sustainable development
- Identify, prioritize and characterize hazards and risks
- Identify and profile vulnerability/capacity conditions of communities and places
- Explain the research methods and tools related to disaster risk and sustainable development
- Explain appropriate and innovative solutions for problems related to disaster risk management and sustainable development
- Distinguish the major public health problems and intervention strategies

#### Skill

- Perform risk and environmental impact assessments
- Develop DRR and contingency plans
- Produce hazard, vulnerability and risk maps
- Coordinate and facilitate preparedness and response activities during disaster emergencies,
- Communicate and disseminate disaster risk related information
- Conduct action research and consultancy in the area of disaster risk management and sustainable development
- Teach/train disaster risk management and sustainable development related courses.
- Demonstrate safety management procedures and standards

#### Attitude

- Appreciate the role of disaster risk management for sustainable development.
- Value participation of disaster affected communities in decision making processes of disaster risk management.
- Promote disaster prevention and safety culture
- Sympathize the needs of disaster affected communities
- Advocate human rights during emergencies

# 9. Admission Requirements

**For regular program**, students whose stream is natural science and social science and who can fulfill the higher education requirements set by the Ministry of Education can join the department. **For Extension and Summer Programs**, students who graduate in certificate level and above in General agriculture, Agricultural Economics, Agricultural Extension, Social Science, Applied science, Engineering and other related fields of study could register for the program.

# 10. Mode of Delivery

The delivery of modules and course will include both block and parallel methods for regular, extension, summer and distance programs

# 11. Duration of the Study

The following are the standard period of study for regular, summer, extension and distance programs

- ✤ 4 years (8 semester )for regular under graduate program
- ✤ 6 years(12 semester and 5 kirmete ) for extension undergraduate program
- ✤ 6 years (12 semester ) for summer under graduate program
- ✤ 7 Years (14 semester) for distance under graduate program

# **12. Graduation Requirements**

From the total of courses taken (with a minimum of 148 credit hours or 250 CP) a candidate eligible for graduation should score 2.0 or better cumulative grade point average (CGPA) over all courses including their major, supportive and common courses. Candidates who have grades like F (Failed), I (Incomplete), NG (No Grade) shall not become eligible for graduation.

# **13. Degree Nomenclature**

Nomenclature of the degree to be awarded on successful completion of the program leads to a certification referred in English as: **Degree of Bachelor of Science in Disaster Risk Management and Sustainable Development,** in Amharic as:

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የሳይንስ ባችለር ዲግሪ በአደጋ ሥጋት መከላከልና ዘላቂ ልማት
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# 14. Assessment Strategies

- i. For theory part courses work
- Quizzes, tests, assignments, mid and final Examination
- ii. For practical courses
- Laboratory reports/ field reports, practical examinations, written examinations
- iii. For research project; field practice and seminars -

Quality of paper presented, style of presentation, adequacy of defending the material presented

## 15. Resources

### 15.1Core Staff Profile

Currently, the following core staffs are available to run the program.

S.No	Full Name	Specialization	Qualificati	Academic Position	Remark
			on		
1.	Adane Tesfaye	Agricultural Pest Management	PhD	Ass. Professor	
2.	Abraham Mebrat	Environmental Engineering	PhD	Associate Professor	
3.	Mossa Endris	Social Anthropology	PhD	Ass.professor	
4.	Birhan Sisay	Developmental Studies (Livelihood & Development)	PhD	Ass.professor	
5.	Tesfahun Asmamaw	Environmental & Geographical Science	PhD	Ass.professor	
6.	Alebel Ayenalem	DRMSD	MSC	Lecturer	
7.	Tarekegn Ayalew	Risk, Crisis, and Disaster Management	MSC	Lecture r	
8.	Yidnekachew Merkeb	Public Health	MSC	Lecturer	
9.	Misganaw Teshager	DRMSD	MSC	Lecture r	PhD Candidate
10.	Fairuz Temam	DRMSD	MSC	Lecturer	
11.	Mentesinot Azene	Development Studies( Environment & Development )	PhD	Ass.professor	
12.	Neima Ahmed	Gender & Development Studies	MSC	Lecturer	
13.	Jemal Simeneh	ICT	BSC	Graduate A.	
14.	Birhanu Gedef	DRMSD	M.A	Ass.professor	
15.	Birtukan Atinkut	DRMSD	MSC	Ass.professor	PhD Candidate
16.	Yilebes Addisu	DRMSD	MSC	Ass.professor	PhD Candidate
17.	Haileyesus Abate	ICT	BSC	Assist. ICT	
18.	Desalegne Chanie	Watershed Management	PhD	Ass.Professor	
19.	Henok Abate	DRMSD	MSC	Lecturer	
20.	Yosef Tameru	Public Health	MSC	Lecturer	
21.	Adey Belete	DRMSD	MSC	Lecturer	
22.	Zerihun Yohanes	Environmental Management	PhD	Ass.professor	

23.	Asaye Yesmaw	DRMSD	MSc	Lecturer	
24.	Mekonon Getachew	DRMSD	BSc	Graduate II	MSc Candidate
25.	Muluneh Getaneh	Natural risk management	MSc	Lecturer	PhD Candidate
26.	Emiyamerew Yoseph	DRMSD	BSc	Technical Assi	MSc Candidate
27.	Dejene Sahlu	Water Resources Engineering and Management	PhD	Ass.Professor	

# 15.2 Affiliated Staff profile

S.No	Full Name	Specialization	Qualification	Academic Position	Remark
1	Atalel Wubalem	Agricultural Economics	MSc	Lecturer	Agr.Economics Dept
2	Kassahun Tasie	Agricultural Economics	MSc	Lecturer	Agr.Economics Dept
3	Hawulet Mohamed	Agricultural Economics	MSc	Lecturer	Agr.Economics Dept
4	Anteneh Mulugeta	Statistics	MSc	Lecturer	Agr.Economics Dept
5	Gashaw Bimerew	Agro-meteorologist	PhD	Ass.Professor	NaRM Dept
6.	Zemen Ayalew	Agricultural Economics	PhD	Ass.Professor	Agr.Economics Dept

#### 15.3. Existing Physical Resources and Infrastructure

The program has basic instructional materials and equipment and has enough reference books and has facilities for producing even the most basic instructional materials. Furthermore, the program will have more partners in the future; given the International and Regional focus that Ethiopia to be a Disaster research and training center. Moreover, to commence this program the IDRMFSS has got sufficient learning materials, study guides for the course as well as the research works. This research and Educational facilities lab will continually be improved and upgraded as the need arises. We will soon have a dedicated laboratory available for advanced image processing and GIS applications and shall be used for accessing and making use of the online data resources. In their stay at our IDRMFSS students will get lab and field practices and excursion, all the necessities are ready for the action. Moreover, we have recently established a computer and GIS laboratory which can be used for Computer and GIS courses this curriculum could have.

#### 15.4. Collaboration and partnershipning

We have established collaboration both in the university and outside the university. within the university we have a strong linkage with College of agriculture and environmental sciences, College of social sciences, College of business and economics, Bahir Dar Institute of Technology (BIT) and others to make use of the university facilities at our best disposal. Besides, we had the working agreement with other organizations operationalize in National Disaster risk Management Commission (NDRMC), Ethiopia like Ethiopian Industrial park corporation (EIPC), Ethiopian Red Cross Society(ERCS), UNDP, USAID, FDRMC, Oxfam-GB, CARE Ethiopia and others where we can tap the resources and study materials developed. In Addition to that, the institute has a number o of network and collaboration out of Ethiopia like Peri Peri U consortium member, Global Network for Disaster Risk (GNDR), African Union, Wageningen University and Arizona University.

### 16. Quality Assurance Mechanisms

The quality of the program is assessed in terms of the instruction performance and the impact of the program on the quality of graduates looking for further studies. With regard to instruction performance, in line with the University policy, students' evaluations are taken in to account. The quality of graduates is measured by the feedback obtained from the employers and stakeholders who are the immediate beneficiaries of the program and also the graduates who are able to rate their own confidence in meeting the challenges they encounter after graduation.

Moreover, the quality assurance officer of the institute shall make sure that teaching and learning process is smooth and according to program and course plans. The quality assurance shall discuss

with course instructors and students to get a feedback on the teaching and learning environment. Written individual works, discussion groups and practical works will form principal ways by which students will be expected to both learn and be assessed.

# **17. Course Information**

# 17.1 Program Structure

This program organized with seven modules and fifty sixtyt courses.

# 17.2 List of Modules and Courses

Module Code	Module Name	Course Name	Course Code	Credit	Lec	Prac	Tutorial	Home Study	СР
Drms-M01	Common Cour	ses							
		Mathematics for Natural Sciences	Math1011	3	3	2	0	5	5
		Communicative English Skills I	FLEn1011	3	3	0	0	7	5
		Geography of Ethiopia and the Horn	GeES1011	3	3	0	0	7	5
		General Physics	Phys1011	3	2	1	0	7	5
		General Psychology	Psyc1011	3	3	0	0	7	5
		Critical Thinking	LoCT1011	3	3	0	0	7	5
		Physical Fitness	SpSc1011	P/F	1	0	1	0	P/F
		Introduction to Emerging Technologies	EmTe1012	3	2	3	0	5	5
		Communicative English Skills II	FLEn1012	3	3	0	0	7	5
		History of Ethiopia and the Horn	Hist1012	3	3	0	0	7	5
		General Chemistry	Chem1012	3	2	0	3	5	5
		General Biology	Biol1012	3	2	0	3	5	5
		Moral and Civic Education	MCiE1012	2	2	0	0	6	4
		Social Anthropology	Anth1012	2	2	0	0	6	4
		Inclusiveness	Incl1012	2	2	0	0	6	4
		Entrepreneurship	MGMT 1012	3	3	0	0	5	5

Drms-M02	SUPPORTIV	E COURSES							
		Economics	Econ2021	3(3+0)	3	0	0	6	5
		Natural Resources	Geog2022	3(3+0)	3	0	0	6	5
		Climate Science & Agro	Drms2023	3(3+0)					5
		Meteorology			3	0	0	6	
		Earth Science	Geol2024	2(2+0)	2	0	0	5	4
		Computer & Its Application	Inct2025	3(2+1)	2	1	0	5	5
Drms-M03	FUNDAMEN	TALS OF DISASTER RISK MANA	GEMENT		•		•		
		Introduction to Disaster Risk	Drms2031	3(3+0)	3				5
		Management				0	0	7	<u> </u>
		Natural Hazards	Drm2032	3(3+0)	3	0	0	7	5
		Anthropogenic Hazards	Drms2033	3(3+0)	3	0	0	7	5
		Perception & Identification of Risk	Drms2034	2(2+0)	2	0	0	5	4
		Disaster Risk Reduction	Drms2035	3(3+0)	3	0	0	6	5
		Early Warning & Risk Information	Drms2036	3(3+0)	3				5
		System				0	0	7	
		Emergency Preparedness & Response	Drms3037	3(3+0)	3	0	0	5	5
		Emergency Logistics Management	Drms4038	2(2+0)	2	0	0	6	4
		Drought and Flood Management	Drms3039	3(3+0)	3	0	0	7	5
		Community Based DRM	Drms2030	3(2+1)	2	1	0	5	6
Drms-M04	SUBJECT SP	ECIFIC DISASTER RISK MANAGI	EMENT						
		Climate Change & Disaster	Drms4041	3(3+0)	3	0	0	6	5
		Crop Production & Risk	Drms3042	3(2+1)	2				6
		Management				1	3	6	
		Animal Production & Risk	Drms3043	3(2+1)	2				6
		Management				1	3	6	
		Urban Risk Management	Drms3044	3(3+0)	3	0	0	5	4

	F	ïre Risk Management	Drms4045	3(2+1)	2	1	0	5	6
Drms-M05	DISASTER AND	SUSTAINABLE DEVELOPMEN	T				l		
	S	ustainable Development	Drms3051	3(3+0)	3	0	0	6	5
	L	ivelihoods and Food Security	Drms2052	3(3+0)	3	0	0	6	5
	E	Disaster Risk Governance & Policy	Drms4053	3(3+0)	3	0	0	6	5
		Disaster Risk Financing and nsurance	Drms3054	2(2+0)	2	0	0	5	4
		roject Management in DRM	Drms4055	2(2+0)	2	0	0	6	4
	E	Development Planning & DRR	Drms3056	3(3+0)	3	0	3	7	5
	R	Relief and Development	Drms4057	3(3+0)	3	0	0	6	5
Drms-M06	CROSS-CUTTIN	IG ISSUES IN DRM	1						
	S	Sociology of Disasters	Drms3061	2(2+0)	2	0	0	5	4
	(	Gender, Disaster & Development	Drms4061	3(3+0)	3	0	0	5	5
	I	Health & Nutrition	Drms3062	3(3+0)	3	0	3	5	5
	H	Food safety	Drms4063	2(2+0)	2	0	3	5	4
	(	Occupational Safety & Health	Drms4064	3(3+0)	3	0	3	6	5
	I	Disaster epidemiology	Drms4065	3(3+0)	3	0	3	6	5
	I	Peace &Conflict Management	Drms4066	3(3+0)	3	0	0	5	5
	1	Migration & Refugees	Drms3067	2(2+0)	2	0	3	6	4
	I	Disaster Trauma Counselling	Drms4068	3(3+0)	3	0	0	5	5
Drms-M07	RESEARCH ME	THODS AND TOOLS IN DRM	1						_1
		Statistics for DRM	Drms2071	3(3+0)	3	0	3	7	5
		GIS & Remote Sensing in DRM	Drms3072	3(2+1)	2	1	3	5	6
		Environmental & Social Impact	Drms4073	3(2+1)	2				6
		Assessment				1	3	7	
		Research Methods in DRM	Drms3074	3(3+0)	3	0	3	7	5
		Scientific Writing Skill &	Drms3075	1(0+1)	0	0	0	5	3

	Seminar Presentation							
	Senior Research Proposal	Drms3076	1(0+1)	0	0	0	5	3
	Senior Research Report	Drms4077	1(0+1)	0	0	0	6	3
	Senior Research Presentation	Drms4078	1(0+1)	0	0	0	3	3

### 17.3. Semester Breakdown

#### Regular

### Year 1 Semester I

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Introduction to Emerging	EmTe 1011	Parallel	3	48	2	0	5	5
Technologies								
Communicative English Skills I	EnLa 1011	parallel	3	48	0	0	7	5
Geography of Ethiopia and the Horn	GeES 1012	Parallel	3	48	0	0	7	5
General Biology	Biol 1011	parallel	3(2+1)	48	1	0	7	5
General Psychology and Life Skills	Psyc 1011	Parallel	3	48	0	0	7	5
Critical thinking	Lo Ct 1011	Parallel	3	48	0	0	7	5
Physical fitness	SpSc 1011	Parallel	2 (P/F)		0	1	0	P/F
Total			18					30

### Year 1 Semester II

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	СР
	Code	Delivery						
Communicative English Skills	FLEn1012	parallel	3	3	0	0	7	5
II								
History of Ethiopia and the	Hist1012	Parallel	3	3	0	0	7	5
Horn								
General Chemistry	Chem1012	parallel	3	2	0	3	5	5
General Biology	Biol1012	Parallel	3	2	0	3	5	5
Moral and Civic Education	MCiE1012	Parallel	2	2	0	0	6	4
Social Anthropology	Anth1012	Parallel	2	2	0	0	6	4
Inclusiveness	Incl1012	Parallel	2	2	0	0	6	4
Total			18					32

#### Year 2 Semester I

Course Title	Course Code	Course Delivery	Cr Hrs	L	Р	Т	HS	СР
	Code	Denvery						
Introduction to Disaster Risk	Drms2031	Parallel	3(3+0)	3	0	0	7	5
Management								
Natural Resources	Geog2022	parallel	3(3+0)	3	0	0	6	5
Natural Hazards	Drm2032	Parallel	3(3+0)	3	0	0	7	5
Earth Science	Geol2024	Parallel	2(2+0)	2	0	0	5	4
Economics	Econ2021	Parallel	3(3+0)	3	0	0	6	5
Anthropogenic Hazards	Drms2033	Parallel	3(3+0)	3	0	0	7	5
Statistics for DRM	Drms2071	Parallel	3(3+0)	3	0	3	7	5
Total			20					34

#### Year 2 Semester II

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Computer and its application	Inct2025	parallel	3(2+1)	3	1	0	5	5
Perception & Identification of Risk	Drms2034	Parallel	2(2+0)	2	0	0	5	4
Early Warning & Risk Information System	Drms2036	Parallel	3(3+0)	3	0	0	7	5
Livelihoods and Food Security	Drms2052	Parallel	3(3+0)	3	0	0	7	5
Community Based DRM	Drms2030	Parallel	3(2+1)	3	1	0	5	5
Disaster Risk Reduction	Drms2035	Parallel	3(3+0)	3	0	0	6	5
Climate Science & Agro-meteorology	Drms2023	Parallel	3(3+0)	3	0	0	6	5
	Total		20					34

#### Year 3 Semester I

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	СР
	Code	Delivery						
Emergency Preparedness & Response	Drms3037	Parallel	3(3+0)	3	0	0	5	5
Sociology of disaster	Drms3061	Parallel	2(2+0)	2	0	0	5	4
Animal Production & Risk Management	Drms3043	parallel	3(2+1)	2	1	3	6	5
Crop Production & Risk Management	Drms3042	Parallel	3(2+1)	2	1	3	6	5
GIS & Remote Sensing in DRM	Drms3072	Parallel	3(2+1)	2	1	3	5	5
Research Methods in DRM	Drms3074	Parallel	3(3+0)	3	0	3	7	5
Sustainable Development	Drms3051	Parallel	3(3+0)	3	0	0	6	5
	Total		20					34

### Year 3 Semester II

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Drought and Flood Management	Drms3039	Parallel	3(3+0)	3	0	0	7	5
Disaster Risk Financing & Insurance	Drms3054	Parallel	2(2+0)	2	0	0	5	4
Urban Risk Management	Drms3044	Parallel	3(3+0)	3	0	0	5	4
Health & Nutrition	Drms3062	Parallel	3(3+0)	3	0	3	5	5
Development Planning & Disaster	Drms3056	Parallel	3(3+0)	3	0	3	7	5
Risk Reduction								
Senior Research Proposal	Drms3076	Parallel	1(0+1)	0	1	0	5	3
Scientific Writing Skill & Seminar	Drms3075	Parallel	1(0+1)	0	1	0	5	3
Presentation								
Migration & Refugees	Drms3067	Parallel	2(2+0)	2	0	3	6	4
	Total		18					33

#### Year 4 Semester I

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Gender, Disaster and Development	Drms4061	Parallel	3(3+0)	3	0	0	5	5
Disaster epidemiology	Drms4065	Parallel	3(3+0)	3	0	3	5	5
Fire Risk Management	Drms4045	Parallel	3(2+1)	2	1	0	5	5
Climate Change & Disaster	Drms4041	Parallel	3(3+0)	3	0	0	6	5
Disaster Trauma Counseling	Drms4068	Parallel	3(3+0)	3	0	0	5	5
Project Management in DRM	Drms4055	Parallel	2(2+0)	2	0	0	6	4
Emergency Logistics Management	Drms4038	Parallel	2(2+0)	2	0	0	6	4
Senior Research Report	Drms4077	Parallel	1(0+1)	0	1	0	6	2
	Total		20					35

### Year 4 Semester II

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Relief and Development	Drms4057	Parallel	3(3+0)	3	0	0	6	5
Food safety	Drms4063	Parallel	2(2+0)	2	0	3	5	4
Peace & Conflict Management	Drms4066	Parallel	3(3+0)	3	0	0	5	5
Occupational Safety & Health	Drms4064	Parallel	3(3+0)	3	0	3	5	5
Environmental & Social Impact	Drms4073	Parallel	3(2+1)	2	1	3	7	5
Assessment								
Disaster Risk Governance & Policy	Drms4053	Parallel	3(3+0)	3	0	0	6	5
Senior Research Project Presentation	Drms4078	Parallel	1(0+1)	0	1	0	3	3
Entrepreneurship	MGMT 1012	Parallel	3(3+0)	3	0	0	5	5
			21					37

### *Total Cr.Hr* = 155

*Total CP =280* 

### Extension

#### Year 1 Semester I

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	СР
	Code	Delivery						
Introduction to Emerging	EmTe	Parallel	3	3	2	0	5	5
Technologies								
Communicative English	EnLa	parallel	3	3	0	0	7	5
I		-						
Geography of Ethiopia and	GeES	Parallel	3	3	0	0	7	5
orn								
General Biology	Biol 1011	parallel	3(2+1	3	1	0	7	5
		-						
	Total	Parallel	12					20

#### Year 1 Semester II

Course Title	Course Code	Course Delivery	Cr Hrs	L	Р	Т	HS	СР
General Psychology and Life Skills	Psyc 1011	Parallel	3	48	0	0	7	5
Critical thinking	Lo Ct 1011	Parallel	3	48	0	0	7	5
Physical fitness	SpSc 1011	Parallel	2		0	1	0	P/F
Communicative English Skills II	FLEn1012	parallel	3	3	0	0	7	5
History of Ethiopia and the Horn	Hist1012	Parallel	3	3	0	0	7	5
	Total		12					20

### Year 1 Semester III (kirmet)

Course Title	Course Code	Course Delivery	Cr Hrs	L	Р	Т	HS	СР
General Chemistry	Chem1012	parallel	3	2	0	3	5	5
General Biology	Biol1012	Parallel	3	2	0	3	5	5
Moral and Civic Education	MCiE1012	Parallel	2	2	0	0	6	4
	Total		8					14

### Year 2 Semesters I

Course Title	Course Code	Course Delivery	Cr Hrs	L	Р	Т	HS	СР
Inclusiveness	Incl1012	Parallel	2	2	0	0	6	4
Introduction to Disaster Risk Management	Drms2031	Parallel	3	3	0	0	7	5
Natural Resources	Geog2022	parallel	3	3	0	0	6	5
Natural Hazards	Drm2032	Parallel	3	3	0	0	7	5
	Total		11					19

#### Year 2 Semesters II

Course Title	Course Code	Course Delivery	Cr Hrs	L	Р	Т	HS	СР
Social Anthropology	Anth101 2	Parallel	2	2	0	0	6	4
Earth Science	Geol2024	Parallel	2	2	0	0	5	4
Economics	Econ2021	Parallel	3	3	0	0	6	5
Anthropogenic Hazards	Drms2033	Parallel	3	3	0	0	7	5
Perception & Identification of Risk	Drms2034	Parallel	2	2	0	0	5	4
	Total		12					22

#### Year 2 Semesters III

Course Title	Course Code	Course Delivery	Cr Hrs	L	Р	Т	HS	СР
Statistics for DRM	Drms2071	Parallel	3(3+0)	3	0	3	7	5
Computer and its application	Inct2025	parallel	3(2+1)	3	1	0	5	5
Early Warning & Risk Information System	Drms2036	Parallel	3(3+0)	3	0	0	7	5
	Total		9					15

#### Year 3 Semesters I

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Livelihoods and Food Security	Drms2052	Parallel	3(3+0)	3	0	0	7	5
Community Based DRM	Drms2030	Parallel	3(2+1)	3	1	0	5	5
Disaster Risk Reduction	Drms2035	Parallel	3(3+0)	3	0	0	6	5
Climate Science & Agro-meteorology	Drms2023	Parallel	3(3+0)	3	0	0	6	5
	Total		12					20

#### Year 3 Semesters II

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS
	Code	Delivery					
Emergency Preparedness & Response	Drms3037	Parallel	3(3+0)	3	0	0	5
Sociology of disaster	Drms3061	Parallel	2(2+0)	2	0	0	5
Animal Production & Risk Management	Drms3043	parallel	3(2+1)	2	1	3	6
Crop Production & Risk Management	Drms3042	Parallel	3(2+1)	2	1	3	6
	Total		11				22

#### Year 3 Semesters III

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
GIS & Remote Sensing in DRM	Drms3072	Parallel	3(2+1)	2	1	3	5	5
Research Methods in DRM	Drms3074	Parallel	3(3+0)	3	0	3	7	5
Sustainable Development	Drms3051	Parallel	3(3+0)	3	0	0	6	5
	Total		9					15

### Year 4 Semesters I

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Drought and Flood Management	Drms3039	Parallel	3(3+0)	3	0	0	7	5
Disaster Risk Financing &Insurance	Drms3054	Parallel	2(2+0)	2	0	0	5	4
Urban Risk Management	Drms3044	Parallel	3(3+0)	3	0	0	5	4
Health & Nutrition	Drms3062	Parallel	3(3+0)	3	0	3	5	5
	Total		11					18

#### Year 4 Semesters II

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Development Planning & Disaster	Drms3056	Parallel	3(3+0)	3	0	3	7	5
Risk Reduction								
Senior Research Proposal	Drms3076	Parallel	1(0+1)	0	1	0	5	3
Scientific Writing Skill & Seminar	Drms3075	Parallel	1(0+1)	0	1	0	5	3
Presentation								
Migration & Refugees	Drms3067	Parallel	2(2+0)	2	0	3	6	4
Gender, Disaster and Development	Drms4061	Parallel	3(3+0)	3	0	0	5	5
	Total		10					20

### Year 4 Semesters III

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	СР
	Code	Delivery						
Disaster epidemiology	Drms4065	Parallel	3(3+0)	3	0	3	5	5
Fire Risk Management	Drms4045	Parallel	3(2+1)	2	1	0	5	5
Climate Change & Disaster	Drms4041	Parallel	3(3+0)	3	0	0	6	5
	Total		9					15

### Year 5 Semesters I

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Disaster Trauma Counseling	Drms4068	Parallel	3(3+0)	3	0	0	5	5
Project Management in DRM	Drms4055	Parallel	2(2+0)	2	0	0	6	4
Emergency Logistics Management	Drms4038	Parallel	2(2+0)	2	0	0	6	4
Senior Research Report	Drms4077	Parallel	1(0+1)	0	1	0	6	2
	Total		11					15

### Year 5 Semesters II

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Relief and Development	Drms4057	Parallel	3(3+0)	3	0	0	6	5
Food safety	Drms4063	Parallel	2(2+0)	2	0	3	5	4
Peace & Conflict Management	Drms4066	Parallel	3(3+0)	3	0	0	5	5
Occupational Safety & Health	Drms4064	Parallel	3(3+0)	3	0	3	5	5
	Total		11					19

#### Year 5 Semesters III

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Environmental & Social Impact	Drms4073	Parallel	3(2+1)	2	1	3	7	5
Assessment								
Disaster Risk Governance & Policy	Drms4053	Parallel	3(3+0)	3	0	0	6	5
Senior Research Project Presentation	Drms4078	Parallel	1(0+1)	0	1	0	3	3
Entrepreneurship	MGMT 1012	Parallel	3(3+0)	3	0	0	5	5
	Total		10					18

#### Summer

### Year 1 Semester I (kiremt)

Course Title	Course Code	Course Delivery	Cr Hrs	L	Р	Т	HS	СР
Introduction to Emerging Technologies	EmTe 1011	Parallel	3	48	2	0	5	5
Communicative English Skills I	EnLa 1011	parallel	3	48	0	0	7	5
Geography of Ethiopia and the Horn	GeES 1012	Parallel	3	48	0	0	7	5
General Biology	Biol 1011	parallel	3(2+1)	48	1	0	7	5
General Psychology and Life Skills	Psyc 1011	Parallel	3	48	0	0	7	5
	Total		15					25

#### Year 1 Semester II (Bega)

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Critical thinking	Lo Ct 1011	Parallel	3	48	0	0	7	5
Physical fitness	SpSc 1011	Parallel	2 (P/F)		0	1	0	P/F
Communicative English Skills	FLEn101	parallel	3	3	0	0	7	5
П	2							
History of Ethiopia and the	Hist1012	Parallel	3	3	0	0	7	5
Horn								
	Total		9					15

#### Year 2 Semester I (kiremt)

Course Title	Course Code	Course Delivery	Cr Hrs	L	Р	Т	HS	CP
General Chemistry	Chem1012	parallel	3	2	0	3	5	5
General Biology	Biol1012	Parallel	3	2	0	3	5	5
Moral and Civic Education	MCiE1012	Parallel	2	2	0	0	6	4
Social Anthropology	Anth1012	Parallel	2	2	0	0	6	4
Inclusiveness	Incl1012	Parallel	2	2	0	0	6	4
Introduction to Disaster Risk Management	Drms2031	Parallel	3(3+0)	3	0	0	7	5
-	Total		15					27

### Year 2 Semesters II (Bega)

Course Title	Course Code	Course Delivery	Cr Hrs	L	Р	Т	HS	СР
Natural Resources	Geog2022	parallel	3(3+0)	3	0	0	6	5
Natural Hazards	Drm2032	Parallel	3(3+0)	3	0	0	7	5
Earth Science	Geol2024	Parallel	2(2+0)	2	0	0	5	4
	Total		8					14

#### Year 3 Semesters I (Kiremt)

Course Title	Course Code	Course	Cr Hrs	L	Р	Т	HS	CP
		Delivery						
Economics	Econ2021	Parallel	3(3+0)	3	0	0	6	5
Anthropogenic Hazards	Drms2033	Parallel	3(3+0)	3	0	0	7	5
Statistics for DRM	Drms2071	Parallel	3(3+0)	3	0	3	7	5
Computer and its application	Inct2025	parallel	3(2+1)	3	1	0	5	5
Perception & Identification of Risk	Drms2034	Parallel	2(2+0)	2	0	0	5	4
	Total		14					24

#### Year 3 Semesters II (Bega)

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Early Warning & Risk Information	Drms2036	Parallel	3(3+0)	3	0	0	7	5
Livelihoods and Food Security	Drms2052	Parallel	3(3+0)	3	0	0	7	5
Community Based DRM	Drms2030	Parallel	3(2+1)	3	1	0	5	5
	Total		9					15

#### Year 4 Semesters I (Kiremt)

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Disaster Risk Reduction	Drms2035	Parallel	3(3+0)	3	0	0	6	5
Climate Science & Agro-meteorology	Drms2023	Parallel	3(3+0)	3	0	0	6	5
Emergency Preparedness & Response	Drms3037	Parallel	3(3+0)	3	0	0	5	5
Sociology of disaster	Drms3061	Parallel	2(2+0)	2	0	0	5	4
Animal Production & Risk Management	Drms3043	parallel	3(2+1)	2	1	3	6	5
	Total		14					24

#### Year 4 Semesters II (Bega)

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Crop Production & Risk Management	Drms3042	Parallel	3(2+1)	2	1	3	6	5
GIS & Remote Sensing in DRM	Drms3072	Parallel	3(2+1)	2	1	3	5	5
Research Methods in DRM	Drms3074	Parallel	3(3+0)	3	0	3	7	5
	Total		9					15

#### Year 5 Semester I (Kiremt)

Course Title	Course	Course	Cr Hrs	L	Р	Т	HS	CP
	Code	Delivery						
Sustainable Development	Drms3051	Parallel	3(3+0)	3	0	0	6	5
Drought and Flood Management	Drms3039	Parallel	3(3+0)	3	0	0	7	5
Disaster Risk Financing &Insurance	Drms3054	Parallel	2(2+0)	2	0	0	5	4
Urban Risk Management	Drms3044	Parallel	3(3+0)	3	0	0	5	4
Health & Nutrition	Drms3062	Parallel	3(3+0)	3	0	3	5	5
	Total		14					23

### Year 5 Semesters II (Bega)

Course Title	Course	Course	Cr Hrs	L	Р	Т	Н	CP
	Code	Delivery					S	
Development Planning & Disaster	Drms3056	Parallel	3(3+0)	3	0	3	7	5
Risk Reduction								
Senior Research Proposal	Drms3076	Parallel	1(0+1)	0	1	0	5	3
Scientific Writing Skill & Seminar	Drms3075	Parallel	1(0+1)	0	1	0	5	3
Presentation								
Migration & Refugees	Drms3067	Parallel	2(2+0)	2	0	3	6	4
	Total		8					16

#### Year 6 Semester I (Kiremt)

Course Title	Course Code	Course	Cr Hrs	L	Р	Т	HS	CP
		Delivery						
Gender, Disaster and Development	Drms4061	Parallel	3(3+0)	3	0	0	5	5
Disaster epidemiology	Drms4065	Parallel	3(3+0)	3	0	3	5	5
Fire Risk Management	Drms4045	Parallel	3(2+1)	2	1	0	5	5
Climate Change & Disaster	Drms4041	Parallel	3(3+0)	3	0	0	6	5
Disaster Trauma Counseling	Drms4068	Parallel	3(3+0)	3	0	0	5	5
	Total		15					25

### Year 6 Semesters II (Bega)

Course Title	Course Code	Course	Cr Hrs	L	Р	Т	HS	CP
		Delivery						
Project Management in DRM	Drms4055	Parallel	2(2+0)	2	0	0	6	4
Emergency Logistics Management	Drms4038	Parallel	2(2+0)	2	0	0	6	4
Senior Research Report	Drms4077	Parallel	1(0+1)	0	1	0	6	2
Relief and Development	Drms4057	Parallel	3(3+0)	3	0	0	6	5
	Total		8					15

#### Year 7 Semester I (Kiremt)

Course Title	Course Code	Course	Cr Hrs	L	Р	Т	HS	CP
		Delivery						
Food safety	Drms4063	Parallel	2(2+0)	2	0	3	5	4
Peace & Conflict Management	Drms4066	Parallel	3(3+0)	3	0	0	5	5
Occupational Safety & Health	Drms4064	Parallel	3(3+0)	3	0	3	5	5
Environmental & Social Impact	Drms4073	Parallel	3(2+1)	2	1	3	7	5
Assessment								
	Total		11					19

### Year 7 Semesters II (Bega)

Course Title	Course Code	Course	Cr Hrs	L	Р	Т	HS	CP
		Delivery						
Disaster Risk Governance	Drms4053	Parallel	3(3+0)	3	0	0	6	5
у								
Senior Research Project	Drms4078	Parallel	1(0+1)	0	1	0	3	3
ation								
Entrepreneurship	MGMT 1012	Parallel	3(3+0)	3	0	0	5	5
	Total		7					13

## Total Cr.Hr = 156

*Total CP =280* 

# 18. Module Profile

	Bahir	Dar Universi	ty					
Institute o	f Disaster Risk Ma			curit	y Stu	dies		
Name of the Depar	tment: Disaster Ri	sk Managemen	t and Su	stain	able l	Devel	opmen	t
Module Name	SUPPORTIVE COUL	RSES						
Module Code	Drms-M02							
Total CP	24							
Module description	intended to provid of the holistic perspector to earth's feature introduce compute	This module consists of the supportive courses of the DRM field that are intended to provide students with well-grounded in a comprehensive knowledge of the holistic perspective of the environment and natural resources, introduction to earth's features and its dynamics, basic concepts of economics and introduce computer basics to students of different backgrounds who will have different responsibilities.						
Objectives of the module	<ul> <li>After completion of this module students will be able to:</li> <li>Define environmental and natural resources and explain its principles and scope.</li> <li>Understand the nature of the earth;</li> <li>Describe what an economics means</li> <li>Indicate how different economic principles are used to analyze and solve problems in various areas of the agriculture sector.</li> <li>list and describe the components of a computer system,</li> <li>develop the skill to surf the internet</li> </ul>							
Module competence	After completion of Comprehen one another Engage in p Know vari firms Develop an application explain the	f this module a st d how the earth's n oroblem solving of e ous decision rules n understanding fo	udent is ex atural syste environmen s that guide or basic ma use compu	m ope tal issu e ratic arket :	rate an ues. onal de structu	ecision ires an	making d their	g in
Mode of delivery	Parallel							
t-Learning methods	Lecture, Presentati	on, Reflection, Pr	actical					
Assessment techniques	Quiz, test, writing	reaction paper, m	id exam, fi	inal ex	xam			
Courses of the Module								
Course Name		Course code	Cr hr	L	Т	Р	HS	СР
Economics		Econ2021	3(3+0)	3	0	0	6	5
Natural Resources				3	0	0	6	5
Climate Science & Agro	Meteorology	Geog2022 Drms2023	3(3+0) 3(3+0)	3	0	0	6	5
Earth Science	- <i>OJ</i>	Geol2024	2(2+0)	2	0	0	5	4
Computer & Its Applicat	ion	Inct2025	3(2+1)	2	1	0	5	5

	<b>Bahir</b>	Dar Universi	ity						
Institute of Disaster Risk Management and Food Security Studies									
Name of the Department: Disaster Risk Management and Sustainable Development									
Module Name	Fundamentals of Disaster Risk Management								
Module Code	Drms-M03								
Total CP	48								
Module description	This module consists of the core courses of the DRM field that are intended to provide students with the basic understanding of the context of the current state of disasters and prevalence of disaster risks through dynamic and holistic conceptual frameworks that enhances efforts to develop an effective and holistic risk & disaster management. Making a clear understanding of the theoretical and applied disciplines that define disaster risk and its management.								
Objectives of the module Module competence	<ul> <li>After completion of this module students will be able to: <ul> <li>Understand the basic concepts related to disaster risk and disaster management</li> <li>Know the spatial &amp; temporal characteristics as well as the causes, impacts &amp; mitigation measures of natural and anthropogenic hazards</li> <li>Perform risk assessment and planning</li> <li>Understand how EW &amp; Information systems work for effective preparedness and response</li> <li>Understand the design and implementation of DRR programs</li> <li>Understand the management of emergency resources</li> </ul> </li> <li>After completion of this module a student is expected to: <ul> <li>Analyse the dynamics of disaster risk</li> <li>Characterize the nature of different hazards</li> <li>Perform risk assessment &amp; planning for DRR &amp; Emergency</li> </ul> </li> </ul>								
Mode of delivery	response Parallel								
t-Learning methods	Lecture, Presentati	on, Reflection. P	ractical						
Assessment techniques	Quiz, test, writing			inal ex	kam				
Courses of the Module									
Course Name		Course code	Cr hr	L	Т	Р	HS	СР	
Introduction to Disaster Risk Management		Drms2031	3(3+0)	3	0	0	7	5	
Natural Hazards		Drm2032	3(3+0)	3	0	0	7	5	
Anthropogenic Hazards		Drms2033	3(3+0)	3	0	0	7	5	
Perception & Identification of Risk		Drms2034	2(2+0)	2	0	0	5	4	
Disaster Risk Reduction		Drms2035	3(3+0)	3	0	0	6	5	
Early Warning & Risk Information System		Drms2036	3(3+0)	3	0	0	7	5	
Emergency Preparedness & Response		Drms3037	3(3+0)	3	0	0	5	5	
Emergency Logistics Management		Drms4038	2(2+0)	2	0	0	6	4	
Drought and Flood Management		Drms3039	3(3+0)	3	0	0	7	5	
Community Based DRM					1	0	5	6	

Bahir Dar University Institute of Disaster Risk Management and Food Security Studies Name of the Department: Disaster Risk Management and Sustainable Development										
Module Name     Subject Specific Disaster Risk Management										
Module Code										
		Drms-M04								
Total CP	24									
Module description	This module is intended to equip students with the skills and knowledge needed to apply disaster risk management principles and processes in various development sectors in both rural and urban settings. The module particularly focuses on application of risk management principles within the agriculture sector as well as the management of risks including fire incidents in the context of urban settings.									
Objectives of the	Upon completion of	Upon completion of this module, students will be able to								
module	<ul> <li>Conduct agricultural risk assessment</li> <li>Develop agricultural risk reduction plans</li> <li>Explain relation between urbanization and disaster risks</li> <li>Identify various urban hazards and risk reduction measures</li> </ul>									
Module competence	After completion of	After completion of this module a student is expected to:								
	<ul> <li>Perform agricultural risk assessment</li> <li>Identify agricultural risk reduction measures</li> <li>Identify structural and non-structural mitigation strategies that help to reduce fire and other urban risks</li> <li>Recognise the need for mainstreaming DRM activities into rural agriculture as well as urban development programs</li> </ul>									
Mode of delivery	Parallel									
t-Learning methods	Lecture Presentatio	on Reflection Pr	actical							
Assessment	Lecture, Presentation, Reflection, Practical Quiz, test, writing reaction paper, mid exam, final exam									
techniques		euclion puper, m	ia chain, in	ui onuii						
Courses of the Module										
Course Title		Course code	Crhr	L	Т	Р	HS	СР		
Climate Change & Disaster		Drms4041	3(3+0)	3	0	0	6	5		
Crop Production & Risk Management		Drms3042	3(3+0) 3(2+1)	2	1	3	6	6		
Animal Production & Risk		Drms3043	3(2+1) 3(2+1)	2	1			6		
Management			- ( /		1	3	6	-		
Urban Risk Management		Drms3044	3(3+0)	3	0	0	5	4		
Fire Risk Manageme		Drms4045	3(2+1)	2	1	0	5	6		

#### Bahir Dar University Institute of Disaster Risk Management and Food Security Studies Name of the Department: Disaster Risk Management and Sustainable Development

Madela Marca								
Module Name	Disaster and Development Drms-M05							
Module Code								
Total CP	33							
Module description	This module comprises seven courses related to Disasters and Development. This module introduces the concepts, policies and theories of development (sustainable development) and disaster risks in order to integrate disaster risk reduction/ or management efforts in project and development planning efforts for sustainable development.							
Objectives of the	Upon successful completion of this module students will be able to:							
module	• Understand the concepts and theories of development							
	-	Zinpranie die internetienden een ein and de enopment						
	• Assess the enabling environments for mainstreaming disaster risk reduction							
	• Understand the tools and ways to integrate disaster risk reduction							
	efforts in project and development planning.							
Module competence	After completion of this module a student is expected to:							
	Analyze the nexus between disaster and development							
	• Apply tools for mainstreaming DRR into development planning							
	Conduct food and livelihood security assessments							
Mode of delivery	Mixed (parallel and Block)							
t-Learning methods	Lecture, Presentation, Reflection, Practical							
Assessment techniques	Quiz, test, writing re	action paper, mi	d exam, fi	nal e	exam			
Courses of the Module		-		·	I	T	[	
Course Title		Course code	Crhr	L	Т	Р	HS	СР
Sustainable Development		Drms3051	3(3+0)	3	0	0	6	5
Livelihoods and Food Security		Drms2052	3(3+0)	3	0	0	6	5
Disaster Risk Governance & Policy		Drms4053	3(3+0)	3	0	0	6	5
Disaster Risk Financing and Insurance		Drms3054	2(2+0)	2	0	0	5	4
Project Management in DRM		Drms4055	2(2+0)	2	0	0	6	4
Development Planning & DRR		Drms3056	3(3+0)	3	0	3	7	5
Relief and Developme	ent	Drms4057	3(3+0)	3	0	0	6	5

	Bahir	Dar Unive	ersity						
Institute o	f Disaster Risk M	anagement a	and Food	l Secu	rity S	Studies	5		
Name of the Depar	tment: Disaster R	isk Managei	ment and	l Sust	ainab	le Dev	elopme	nt	
Module Name	Cross Cutting issues in DRM								
Module Code	Drms-M06								
Total CP	39								
Module description	This module provides a basic understanding of cross cutting issues such as migration & refugee, health & nutrition as well as gender issues in the context of disaster emergencies. Primarily it focuses on policy dialogues and empirical evidences regard to migration, gender, epidemiology health and nutrition and their relation to disaster.								
Objectives of the module	<ul> <li>Upon successful completion of this module students will be able to:</li> <li>Describe the variations in the construction of gender in different social and cultural contexts;</li> <li>Recognize concepts of health and nutrition</li> <li>Discuss the causes, types and nature of Migration</li> <li>Explain temporary or permanent, internal or international migration</li> <li>Comprehend disease epidemiology</li> <li>Identify vulnerable groups in disaster</li> <li>Discuss public health interventions in the context of nutrition before, during and after humanitarian crisis</li> </ul>								
Module competence	<ul> <li>After completion of this module a student is expected to:</li> <li>analyze health issues in the context of disaster emergencies</li> <li>applyhealth and safety issues in occupations</li> <li>work with refugee &amp; displaced populations</li> <li>develop skills of counseling in disaster situations</li> <li>Conduct nutritional assessments in the context of emergencies</li> <li>Appreciate the role of gender in disaster emergencies</li> </ul>								
Mode of delivery	Mixed (Parallel and Block)								
t-Learning methods	Lecture, Presentati	on, Reflection	, Practical	1					
Assessment techniques	Quiz, test, writing	reaction paper	, mid exa	m, fina	ıl exan	1			
<b>Courses of the Module</b>	•								
Course Name		Course code	Cr hr	L	Т	Р	HS	СР	
Sociology of Disasters		Drms3061	2(2+0)	2	0	0	5	4	
Gender, Disaster & Development		Drms4061	3(3+0)	3	0	0	5	5	
Health & Nutrition		Drms3062	3(3+0)	3	0	3	5	5	
Food safety		Drms4063	2(2+0)	2	0	3	5	4	
Occupational Safety & Health		Drms4064	3(3+0)	3	0	3	6	5	
Disaster epidemiology		Drms4065	3(3+0)	3	0	3	6	5	
Peace &Conflict Management		Drms4066	3(3+0)	3	0	0	5	5	
Migration & Refugees		Drms3067	2(2+0)	2	0	3	6	4	



The second s							
Bahir Dar University							
Institute of Disaster Risk Management and Food Security Studies							
Name of the Depart	Name of the Department: Disaster Risk Management and Sustainable Development						
Module Name	Research Methods & Tools						
Module Code	Drms-M07						
Total CP	17						
Module description	This module is designed to develop students' research skills by giving due emphasis to ways of collecting, documenting, organizing, and analyzing both qualitative and quantitative data. The module is believed to expose students to scientific research methods. In this part of the module student will train on the ways of designing and conducting research. It briefly introduces students to the complementarities of the research method and it emphasizes the discussion on designing, collecting, analyzing both qualitative and quantitative research data. Disaster risk information is spatial in nature and Geographic Information Systems (GIS) play an important role in disaster risk management. Knowing the spatial distribution of risks and opportunities helps in development planning. Therefore the module tries to enhance the capabilities of students in Food Security and livelihood Analysis by providing them with an understanding on the use of spatial and Earth Observation information as a tool to integrate knowledge about disaster risk management in a meaningful and innovative way. And finally, the module will introduce Students to know the establishing statements, details, analysis, conclusion and link components on written papers and know the details on how to prepare the introduction, how to go about critical review of the literature and how to write acceptable reports and finally, how to summarized in a Power Point presentation that will be presented and defended in the seminar day of the programme.						
Objectives of the module	<ul> <li>After completion of this module students will be able to:</li> <li>Introduce the essential principles of research methodology that constitute the foundation the applied research enterprise</li> <li>Provide the methodological basis to assess the validity and reliability of research results reported in the professional literature and presented in public discourse</li> <li>Introduce the range of quantitative and qualitative research tools commonly used to design and carry out professional research projects</li> <li>Give students an opportunity to design their individual research projects</li> <li>Apply GIS and RS for designing implementations of large</li> </ul>						

	scale	e early warning	g systems					
		• Use participatory GIS (PGIS) at community level						
		• Apply GIS/remote sensing in hazard, vulnerability					y	
		risk assessme				ŗ		-
	• App	lication of rem	ote sensin	ig data	and i	mage p	rocessir	ng
		niques to moni						
		erstand the spa						
		agement Empl						
		aredness plann					nformat	tion
Module competence	-	tion of this mod			pected	to:		
		yse the dynamic			1.			
		acterize the natu				חחח	e Ema	
	• Perio	orm risk asses	sment &	pianni	ig for	DKK	a Enle	rgency
Mode of delivery	Mixed (Paral							
t-Learning methods	Lecture, Pres	entation, Reflec	tion, Praction	cal				
Assessment techniques	Assessment techniques Quiz, test, writing reaction paper, mid exam, final exam							
Courses of the Module								
Course Name		Course code	Cr hr	L	Т	Р	HS	СР
Statistics for DRM		Drms2071	3(3+0)	3	0	3	7	5
GIS & Remote Sensing in	n DRM	Drms3072	3(2+1)	2	1	3	5	6
Environmental & Social	Impact	Drms4073	3(2+1)	2				6
Assessment					1	3	7	
Research Methods in DRM		Drms3074	3(3+0)	3	0	3	7	5
Scientific Writing Skill &	2 Seminar	Drms3075	1(0+1)	0				3
Presentation					0	0	5	
Senior Research Proposal		Drms3076	1(0+1)	0	0	0	5	3
Senior Research Report		Drms4077	1(0+1)	0	0	0	6	3
Senior Research Presenta	tion	Drms4078	1(0+1)	0	0	0	3	3

# **19. Course Guidebooks**



#### BAHIR DAR UNIVERSITY

Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management & Sustainable Development

1. Course Information						
Course Title	Mathematics f	Mathematics for Natural Sciences				
Course Code	Math1011	Math1011				
Credit Hrs./ ECTS	Cr Hrs=3	Cr Hrs=3 L=3 T=2 P=0 H=5 CP=5				
Semester	Ι	I				
Year	Ι	Ι				
Pre-requisites	None					
Target Group	First Year DF	RMSD Students				
Status of the course	Common	Common				
Instructor's Name and Address						

#### 2. Course Description:

The course intends to prepare natural science students with the basic concepts and materials from mathematics that necessitate a good foundation to treat fundamental mathematical tools in science. This course rigorously discusses the basic concepts of logic and set theory, the real and complex number systems, mathematical induction, least upper bound and greatest lower bound, functions and types of functions, polynomial and rational functions, logarithmic and exponential functions, trigonometric functions, hyperbolic functions and their graphs and analytic geometry.

#### 3. Course Objectives

After completion of the course, students will be able to:

- ✓ apply propositional logic in reasoning,
- ✓ use quantifiers in open propositions in mathematical logic
- ✓ understand concepts of sets and set operations
- ✓ understand the fundamental properties of real numbers
- $\checkmark$  use mathematical induction in proofs
- ✓ analyze least upper bound and greatest lower bound
- ✓ understand the fundamental properties of complex numbers
- $\checkmark$  express complex numbers in polar representation
- $\checkmark$  explain different types of functions, their inverses and their graphs
- ✓ evaluate zeros of polynomials
- ✓ Understand basic properties of logarithmic, exponential, hyperbolic, and trigonometric functions
- ✓ understand basic concept of analytic geometry
- ✓ derive equations of conic sections

## 4. Syllabus Components

#### 4.1. Course Contents, Methods & strategies, and learning outcomes

E Content & sub-contents strategies Students Task chapter students	Time	Content & sub-contents	Methods and strategies	Students Task	Learning Outcomes At the end of this chapter students wi be able to:
--	------	------------------------	------------------------	---------------	---

Week 1-3	Chapter One: Propositional Logic and Set Theory1.1. Definition and examples of proposition1.1.1 Logical connectives1.1.2 Compound (or complex) propositions1.1.3 Tautology and contradiction1.1.4 Open proposition and quantifiers1.2 Set theory1.2.1 The concept of a set1.2.2 Description of sets1.2.3 Set operations and Venn diagrams	<ul> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Problem solving method</li> <li>Class work</li> <li>Tutorials</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Describe the concepts of mathematical logic and set theory,</li> <li>Apply logic in reasoning and mathematical proofs,</li> <li>State properties of sets and use set operations,</li> </ul>
Week 4 - 7	<ul> <li>Chapter Two: The Real and Complex Number Systems</li> <li>2.1 The real Number System</li> <li>2.1.1 The natural numbers, Principle of mathematical induction and the Well ordering principle</li> <li>2.1.2 The integers, rational numbers and irrational numbers</li> <li>2.1.3 Upper bound, lower bound, lub, glb, completeness property of the set of real numbers.</li> <li>2.2 Complex number system</li> <li>2.1.1 Definition of complex numbers and the underlying operations</li> <li>2.2.2 Polar representation of complex numbers and the De-Mover's formula</li> <li>2.2.3 Extraction of roots</li> </ul>	<ul> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Problem solving method</li> <li>Class work</li> <li>Tutorials</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Describe the fundamental properties of real and complex numbers,</li> <li>Find least upper bound and greatest lower bound sets,</li> <li>Use mathematical induction in proofs,</li> <li>Write polar representation of complex numbers,</li> </ul>
Week 8-11	<ul> <li>Chapter Three. Functions</li> <li>3.1 Review of relations and functions</li> <li>3.2 Real-valued functions and their properties</li> <li>3.3 Types of functions (one-to-one, onto) and inverse of a function</li> <li>3.4 Polynomials, zero's of polynomials, rational functions, and their graphs,</li> <li>3.5 Definitions and basic properties of logarithmic, exponential, hyperbolic, trigonometric functions, and their graphs</li> </ul>	<ul> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Problem solving method</li> <li>Class work</li> <li>Tutorials</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Identify different types of functions, their inverses and graphs,</li> <li>Find zero's of some polynomials,</li> <li>Use basic properties of logarithmic, exponential, hyperbolic, and trigonometric functions.</li> <li>Find inverse of a given function</li> </ul>

Week 12 - 16	<ul> <li>4.1 The stra and varie</li> <li>4.2 Circles</li> <li>4.2.1 Def</li> <li>4.2.2 Equ orig</li> <li>4.2.3 Inter</li> <li>4.3 Parabola</li> <li>4.3.1 Deff form</li> <li>4.3.2 Equ axis</li> <li>4.4 Ellipse</li> <li>4.4.1 Deff</li> <li>4.4.2 Equ and</li> <li>4.5 Hyperbo</li> <li>4.5.1 Equ orig</li> </ul>	inition of parabola and standard n of equation of parabola. ation of parabola parallel to the x- (the y-axis) inition of Ellipse and examples ation of ellipse centre at the origin different from the origin la nation of hyperbola of center at the in transverse axis to x-axis (the y-	<ul> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Problem solving method</li> <li>Class work</li> <li>Tutorials</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Identify various forms of conic sections'</li> <li>Derive the Equations of different conic sections.</li> </ul>		
Asses	axis)         4.2. Assessment Strategies & Techniques and Course Policy         Assessment       > Continuous assessment (Tests, Quizes, Assignments 25 %)         • Test						
	References Haile, A. &	* ÷	l Sciences	.U.			

• Abay, A. (1998). An Introduction to Analytic Geometry. AAU.

Approval Section				
	Name	Signature	Date	
Chair Holder				
Department Head				



# BAHIR DAR UNIVERSITY

# Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management & Sustainable Development

1. Co	1. Course Information						
	Course Title Communicative English Skills I						
	se Code	FLEn1011					
Credi ECTS	it Hrs./ S	Cr Hrs=3	L=3	T=0	P=0	H=7	CP=5
Seme	ester	Ι				•	
Year		Ι					
Pre-re	equisites	None					
Targe	et Group	First year DI	RMSD stude	nts			
Instru	ictor's name a	nd Address:					
Statu	s of the course	e: Common					
Status of the course: Common         2. Course Description:         Communicative English Skills I is a course designed to enable students to communicate in English intelligibly with acceptable accuracy, fluency and ability to use English appropriately in different contexts. The course exposes students to English language learning activities designed to help students use English for their academic and social needs. Students would be engaged in language learning development activities through doing and reflection on action. This includes grammar and vocabulary as used in communicative events and all skills and their sub-kills: speaking, listening, reading and writing. The language and skills are integrated where one becomes a resource to the other. There are six units covering topics related to the life world of students as well as of societal relevance.         3. Objective of the course         Upon completing this module, you will be able to:         > express yourself in social and academic events in English;         > use English with reasonable level of accuracy and fluency;         > listen to talks related to social and academic events given in English;         > read and understand academic and other texts written in English;         > write in English as academically and socially appropriate; and         > learn and develop your English on your own.							
	<ul><li>4. Syllabus Components</li><li>4.1. Course Contents, Methods &amp; strategies, and learning outcomes</li></ul>						
Time		nt & sub-conte		Methods and strategies	Students Ta	nsk At t cha	Learning Dutcomes: he end of this pter students Il be able to:

Week 1& 2	<ul> <li>UNIT 1: Study Skills</li> <li>1.1 Listening</li> <li>1.2 Grammar focus: Modals and infinitives for giving advice</li> <li>1.3 Reading</li> <li>1.4 Grammar focus: Present perfect tense</li> <li>1.5 Reflections</li> <li>1.6 Self assessment</li> <li>1.7 Summary</li> </ul>	<ul> <li>Listening</li> <li>Note-taking</li> <li>Brainstormin g</li> <li>Reading</li> <li>Individual work</li> <li>Group discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works and home works,</li> <li>Reflects</li> </ul>	<ul> <li>Develop listening skills</li> <li>Develop the knowledge of grammar</li> <li>Use the present perfect tense ; modals appropriately and correctly</li> <li>Develop reading skills</li> </ul>
Week 3-6	<ul> <li>Unit 2: Health and Fitness</li> <li>2.1 Listening: Zinedine Zidane</li> <li>2.2 Grammar focus: Conditionals</li> <li>2.3 Reading: Health and fitness</li> <li>2.4 Vocabulary: Guessing meaning from context</li> <li>2.5 Reflections</li> <li>2.6 Self assessment</li> <li>2.7 Summary</li> </ul>	<ul> <li>Listening</li> <li>Note-taking</li> <li>Brainstormin g</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Class work</li> <li>Tutorials</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions</li> <li>Reflects</li> </ul>	<ul> <li>Take lecture notes by listening to a talk;</li> <li>Give advice using appropriate language;</li> <li>Identify the various purposes for reading;</li> <li>Read and make notes;</li> <li>Guess meanings of words from a context</li> <li>Use the present perfect tense appropriatel y and correctly</li> </ul>

		-		
Weeks 7 & 8	Unit 3: Cultural Values 3.1. Listening: Cultural tourism 3.2 Grammar focus: The present simple, past simple, present perfect and past perfect in contrast 3.3 Strategies for improving English grammar knowledge 3.4 Reading: The Awramba community 3.5 Reflections 3.6 Self assessment 3.7 Summary	<ul> <li>Listening</li> <li>Note-taking</li> <li>Brainstormin g</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Class work</li> <li>Tutorials</li> <li>Reflections</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions</li> <li>Reflects</li> </ul>	<ul> <li>listen to a lecture;</li> <li>make notes while listening to a lecture;</li> <li>read an article and answer comprehensi on questions;</li> <li>work out meanings of new words from context;</li> <li>use simple present, simple past, present perfect and past perfect tenses orally and in writing;</li> <li>converse in English about culture and cultural values; and reflects.</li> </ul>

Week 9-12	<ul> <li>4.1 Listening: Human-wildlife interaction</li> <li>4.2 Reading: Africa's wild animals</li> <li>4.3 Vocabulary: Denotative and connotative meanings</li> <li>4.4 Grammar focus: Conditionals revised</li> <li>4.5Reflections</li> </ul>	<ul> <li>Listening</li> <li>Note-taking</li> <li>Brainstormin g</li> <li>Reading</li> <li>Individual work</li> <li>Group discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions</li> <li>Reflects</li> </ul>	<ul> <li>interact         <ul> <li>in English             based on             backgrou             nd             knowled             ge;</li> <li>listen to             a talk             and take             notes;</li>             predict             the             content             of a             reading             text;</ul></li>             make             notes             while             reading;             explain             and use             the             denotativ             e and             connotati             ve             meaning             s of             words;             interact             in             English             using             written             notes             and             answers             to             exercises             ; and </ul>
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5.1 Lister 5.2 Read 5.3 Voca 5.4 Gram 5.5 Refle	opulation ning: Population density ing: Population pyramid bulary: Collocation mar focus: Voice ctions	<ul> <li>Listening</li> <li>Note-taking</li> <li>Brainstormin g</li> <li>Reading</li> <li>Individual work</li> <li>Group discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> <li>Reflects</li> </ul>	<ul> <li>predict the content of a listening text;</li> <li>read and summari ze an article;</li> <li>interact in English using notes,;</li> <li>construct correct active and passive sentence s;</li> <li>reflect on the relevanc e of the tasks in this unit; and</li> <li>self- assess the progress you have made in learning English.</li> </ul>			
				00/			
Course policy	Assessment       • Test						

-	attend at least 85% of the classes.
-	take all continuous assessments and mid Exam.
-	take final examination.
-	respect all rules & regulations of the university.

## 4.3 Instructional Resources

#### Module

Module for the course Communicative English Skills I

# References

Gairns, R. & Redman, S. 1986. *Working with words: A guide to teaching and learning vocabulary*. Cambridge University Press.

Murphy R. 2004. English grammar in use: A self-study reference and practice book for intermediate students of English (3<sup>rd</sup> Ed.). Cambridge University Press.

Approval section						
Name Signature Date						
Chair Holder's						
Department Head's						



## Institute of Disaster Risk Management and Food Security Studies

#### Department of Disaster Risk Management & Sustainable Development

1. Course information						
Course Title	Geography of Ethiopia and the Horn					
Course Code	GeES 1011	GeES 1011				
Credit Hrs/ECTS	Cr Hrs = 3     L = 3     T = 0     P = 0     H = 7     CP = 5					
Semester	Ι					
Year	Ι					
Pre-requisites	None					
Target group	First year DR	MSD stud	lents			
Status of the Course	Common cou	irse				
Instructor's Name and	Instructor's Name and					
Address						
2. COURSE DESCRIPTION						
This course attempts to fami	liarize students	s with the b	oasic geogra	aphic concepts	particularly	in relation to

Ethiopia and the Horn of Africa. It is also intended to provide students a sense of place and time (geographic literacy) that are pivotal in producing knowledgeable and competent citizens that are able to comprehend and analyze problems and contribute to their solutions. The course consists of four parts. The first part provides a brief description on the location, shape and size of Ethiopia as well as basic skills of reading maps. Part two introduces the physical background and natural resource endowment of Ethiopia and the Horn which includes its geology and mineral resources, topography, climate, drainage and water resources, soil, fauna and flora. The third part of the course focuses on the demographic characteristics of the country and its implications on economic development. The fourth component of the course offers treatment of the various economic activities of Ethiopia and the Horn which include agriculture, manufacturing and service sectors. Moreover, Ethiopia in a globalizing world is treated in the perspectives of the pros and cons of globalization on its natural resources, population and socio-economic conditions.

# **3. COURSE OBJECTIVES**

Upon completion of this course the students will be able to:

- o Describe the location, shape and size of Ethiopia and the Horn
- Explain the implications of location, shape and size of Ethiopia and the Horn on the physical environment, socioeconomic and political aspects.
- Elaborate the major geological events; the resultant landforms and mineral resources of Ethiopia and the Horn.
- Identify the major drainage systems and water resources of Ethiopia and their implications for regional development and integration.
- Develop an understanding of the climate of Ethiopia, its dynamics and implications on the livelihoods of its inhabitants.
- Examine the spatio-temporal distribution and abundance of natural vegetation, wildlife and Soil resources of Ethiopia.
- Discuss the demographic attributes and dynamics as well as the ethnic diversity of Ethiopia.
- Read maps as well as compute basic demographic and climatic rates
- o Appreciate the biophysical and socio-cultural diversities in Ethiopia and the Horn
- Explicate the major types of economic activities in Ethiopia; discern their spatio-temporal distributions and their contributions to the overall development of the country.
- Comprehend the effects of globalization on the socioeconomic development of Ethiopian and the Horn. **4. EXPECTED LEARNING OUTCOMES**
- Acquire basic knowledge on the geographic attributes of Ethiopia and the Horn
- Develop a sense of appreciation and tolerance of cultural diversities and their interactions
- Acquire general understanding of physical geographic process, and human environment relationships
- Develop ethical aptitudes and dispositions necessary to live in harmony with the natural environment
- Develop an understanding of national population distributional patterns and dynamics
- Conceptualize the comparative advantages of economic regimes; and understand the impacts of globalization
- Understand their country's overall geographic conditions and opportunities; and be proud of the natural endowments and cultural wisdom that help them develop a sense of being an Ethiopian.

## **5.** Syllabus Components

5.1. Course content, methods & strategies, and learning outcomes

Time	Contents and sub-contents	Methods and strategies	Student Task	Learning Outcomes: At the end of this chapter students will be able to:
Week 1 & 2	<ol> <li>INTRODUCTION (5 hrs)</li> <li>I.1.Geography: Definition, scope, themes and approaches</li> <li>I.2. Location, Shape and Size of Ethiopia and the Horn</li> <li>I.2.1. Location and its effects</li> <li>I.2.2. The shape of Ethiopia and its implication</li> <li>I.2.3. The size of Ethiopia and its implications</li> <li>I.3.Basic Skills of Map Reading</li> </ol>	<ul> <li>Lecture</li> <li>Group discussion</li> <li>Class work (map reading)</li> </ul>	<ul> <li>Attend the lesson and take short note,</li> <li>Asking and answering questions,</li> <li>Participating in group discussion</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Describe the concept of location, size, shape of geographic features in spatial context</li> <li>To read and differentiate Earth's surface features from maps</li> <li>Acquire basic knowledge on the geographic attributes of Ethiopia and the horn</li> </ul>
Week 2, 3 &4	<ul> <li>2. The Geology of Ethiopia &amp; the horn (5 hrs)</li> <li>2.1. Introduction</li> <li>2.2. The geologic process: Endogenic and Exogenic forces</li> <li>2.3. The geological time scale and age dating techniques</li> <li>2.4. Geological processes and the resulting landforms</li> <li>2.4.1. The Precambrian Era geologic processes and resultant features</li> <li>2.4.2. The Paleozoic Era geologic processes and resultant features</li> <li>2.4.3. The Cenozoic Era geologic processes and resultant features</li> <li>2.5. Rock and Mineral resources of Ethiopia</li> </ul>	<ul> <li>Lecture</li> <li>Group discussion</li> <li>Class work (map reading)</li> <li>Home work</li> </ul>	<ul> <li>Attend the lesson and take short note,</li> <li>Asking and answering questions,</li> <li>Participating in group discussion</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Describe the concept of geology, geological time scale and dating, the geologic processes and their effects on the surface on the Earth (Landform formations)</li> <li>Acquire general understanding of physical geographic process, and human environment relationships</li> <li>Acquire basic knowledge on major rock types and mineral resources in Ethiopia and the horn</li> </ul>

Week 4 & 5	<ul> <li>3. The Topography of Ethiopia and the horn (3 hrs)</li> <li>3.1. Introduction</li> <li>3.2. Physiographic divisions</li> <li>3.2.1. The western highlands and lowlands</li> <li>3.2.2. The southern highlands and lowlands</li> <li>3.2.3. The rift valley</li> <li>3.3. The impact of relief on biophysical and socioeconomic conditions</li> </ul>	<ul> <li>Lecture</li> <li>Group discussion</li> <li>Class work (map reading)</li> <li>Home work</li> </ul>	<ul> <li>Attend the lesson and take short note,</li> <li>Asking and answering questions,</li> <li>Participating in group discussion</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Describe the concept of physiography and physiographic divisions</li> <li>Acquire general understanding topographic conditions of Ethiopia</li> <li>Acquire basic knowledge on the geographic location and areal extent Ethiopian highlands</li> <li>Understand the effect of topography on climate and socioeconomic conditions of the settlers.</li> </ul>
Week 6 & 7	<ul> <li>4. Drainage systems and water resources of Ethiopia and the horn (5 hrs)</li> <li>4.1. Introduction</li> <li>4.2. Major drainage systems of Ethiopia</li> <li>4.3. Water resources: Rivers, Lakes, and subsurface water</li> <li>4.4. General characteristics of Ethiopian rivers</li> <li>4.5. Water resources potentials and development in Ethiopia</li> </ul>	<ul> <li>Lecture</li> <li>Group discussion</li> <li>Class work (map reading)</li> <li>Home work</li> </ul>	<ul> <li>Attend the lesson and take short note,</li> <li>Asking and answering questions,</li> <li>Participating in group discussion</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Acquire basic knowledge on water resources of Ethiopia</li> <li>Describe the concept of drainage and drainage systems</li> <li>Characterize the major river basins of Ethiopia</li> </ul>
Week 8 and 9	<ul> <li>5. The climate of Ethiopia and the horn (7 hrs)</li> <li>5.1. Introduction</li> <li>5.2. Element and controls of weather and climate</li> <li>5.3. Spatiotemporal patterns and distribution of temperature and rainfall in Ethiopia</li> <li>5.4. Agro-ecological zones of Ethiopia</li> <li>5.5. Climate and its implications on biophysical and socioeconomic aspects</li> <li>5.6. Climate change/ global warming: causes, consequences and response mechanisms</li> </ul>	<ul> <li>Lecture</li> <li>Group discussion</li> <li>Class work (map reading)</li> <li>Home work</li> </ul>	<ul> <li>Attend the lesson and take short note,</li> <li>Asking and answering questions,</li> <li>Participating in group discussion</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Describe the concept climate and weather</li> <li>Understand weather and climatic conditions of Ethiopia (climatic zonation and zoning in Ethiopia)</li> <li>Describe the concept of agroecology and agro- ecological zonation's</li> <li>Understand agro- ecological zones of Ethiopia</li> </ul>

Week 10 & 11	<ul> <li>6. Soils, Natural vegetation and Wildlife resources of Ethiopia and the horn (6 hrs)</li> <li>6.1. Introduction</li> <li>6.2. Ethiopian soils: types, degradation and conservation</li> <li>6.3. Types and distribution of natural vegetation in Ethiopia</li> <li>6.4. Natural vegetation: Uses, degradation and conservation strategies</li> <li>6.5. Wildlife resources of Ethiopia: Types, Importance, and conservation strategies</li> </ul>	<ul> <li>Lecture</li> <li>Group discussion</li> <li>Class work (map reading)</li> <li>Home work</li> </ul>	<ul> <li>Attend the lesson and take short note,</li> <li>Asking and answering questions,</li> <li>Participating in group discussion</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Describe the concept natural resources</li> <li>Explain the major types on natural resources of Ethiopia</li> <li>Understand the geographic distribution of major natural resources of Ethiopia</li> <li>Acquire knowledge on natural resources degradation and conservation, and their extent in Ethiopia</li> </ul>
Week 12 &13	<ul> <li>7. Population of Ethiopia and the horn (8 hrs)</li> <li>7.1. Introduction</li> <li>7.2. Population data: uses and sources</li> <li>7.3. Population dynamics: Fertility, Mortality and migration</li> <li>7.4. Population distribution and composition</li> <li>7.5. Sociocultural aspects of Ethiopian population: Education, health and languages</li> <li>7.6. Settlement types and patterns</li> </ul>	<ul> <li>Lecture</li> <li>Group discussion</li> <li>Class work (map reading)</li> <li>Home work</li> </ul>	<ul> <li>Attend the lesson and take short note,</li> <li>Asking and answering questions,</li> <li>Participating in group discussion</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Extent in Ethiopia</li> <li>Describe the concept population, population dynamics, distributions and sociocultural aspects of Ethiopian population</li> <li>Acquire general understanding of physical geographic process, and human environment relationships</li> <li>Develop ethical aptitudes and dispositions necessary to live in harmony with the natural environment</li> <li>Develop an understanding of national population distributional patterns and dynamics</li> </ul>

	8. Economic a	activities in Ethiopia (9				
Week 14, 15 & 16	hrs) 8.1. Introducti 8.2. Mining, f 8.3. Agricultu 8.3.1. Contr chara Ethio 8.3.2. Agric 8.3.3. Major agricu 8.4. Manufact 8.4.1. Manu contri 8.4.2. Types distril 8.4.3. Indus Ethio prosp 8.5. The service 8.5.1. Trans comm types 8.5.2. Trade contri 8.5.3. Touri major	ion ishing and forestry re in Ethiopia ibutions, potentials & cteristics of agriculture in pia ultural systems in Ethiopia r problems of Ethiopian alture uring in Ethiopia ifacturing: essence and ibutions s, characteristics and butions of manufacturing trial development in pia: Challenges and	<ul> <li>Lecture</li> <li>Group discussion</li> <li>Class work (map reading)</li> <li>Home work</li> </ul>	<ul> <li>Attend the lesson and take short note,</li> <li>Asking and answering questions,</li> <li>Participating in group discussion</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Describe the concept socioeconomic activities</li> <li>Understand agricultural systems of Ethiopia</li> <li>Develop a sense of appreciation and tolerance of cultural diversities and their interactions</li> <li>Conceptualize the comparative advantages of economic regimes; and understand the impacts of globalization</li> </ul>	
4.2	2. Assessment	strategies and techniques	and course policy			
As	Assessment       • Continuous assessment (tests (10%), Quizzes (5%), assessment (10%)),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Co	A student has to:       •         • Attend at least 85% of the classes.       •         • Take all continuous assessments and mid exam.       •         • Take final examination.       •         • Respect all rules and regulations of the university.					

## 4.3. Instructional resources

#### Textbooks:

Addis Ababa University (2001). Introductory geography of Ethiopia, Teachers Text, Department of Geography Awulachew S.B., et al (2007). Water resources and irrigation development in Ethiopia. Colombo, Srilanka: IWMI (working paper 123)

Paolo Billi (2015). Landscape and Landforms of Ethiopia. Springer Dordrecht Heidelberg New York, London. Module of Geography of Ethiopia and the Horn

#### **Reference:**

Abbate E., Bruni P., Sagri M. (2015) Geology of Ethiopia: a review and geomorphological perspectives.

Assefa M., Melese W., Shimelis G. (2014). Nile river Basin; Ecohydrological challenges, climate change and hydropolitics. Springer International Publishing, Switzerland.

- Engdawork Assefa (2015). Characterization and classification of major agricultural soils in CASCEP intervention Wereda's in the central highlands of Oromia Region, Ethiopia, Addis Ababa University
- Eyasu Elias (2016). Soils of the Ethiopian Highlands: Geomorphology and properties. CASCAPE Project, ALTRA, Wageningen University and Research Center (Wageningen UR). The Netherlands. 385 pp
- Laurence G., Jeremias M., Tilahun A., Kenneth M. (2012). Integrated Natural Resource Management in The Highlands of Eastern Africa; From Concept to Practice. New York, Earthscan.
- Ministry of Agriculture/MOA/ (1998). Agro-ecological zones of Ethiopia: Natural Resources Management and Regulatory Department, Addis Ababa
- Robert, E.G, James, F.P & Michael T. (2007). Essentials of physical geography. Thomson Higher education, Belmont, 8<sup>th</sup> edition.
- Solomom T., Jean-Pierre M., Yves D., (2003). Geology and mineral potential of Ethiopia: a note on geology and mineral map of Ethiopia. Elsever Ltd.
- UNDP, FAO (1984) Ethiopia Forest Resources and Potential for Development; An assistance to land use planning.

Approval Section					
	Name	Signature	Date		
Chair holder					
Department Head					

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## BAHIR DAR UNIVERSITY Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management & Sustainable Development

1. Course Information	1. Course Information					
Course Title	General Physics					
Course Code	Phys1011					
Credit Hrs./ ECTS	Cr Hrs=3	L=2	T=1	P=0	H=7	Cp=5
Contact Hrs.	Two lectu	re hours + 1 Tut	orial			
Semester	Ι					
Year	Ι					
Pre-requisites	None					
Target Group	First year	DRMSD studen	ts			
Status of the Course	Common	course				
Instructor's Name and Address						

2. Course Description:

This algebra based course provides science students the basic concepts of physics. It also equips them with the vocabulary, description and quantification of the mechanism of how the natural world around us behaves. It is also designed on the assumption that, it covers most topics for much diversified fields of science application, as students inevitably go in different direction. At the same time it puts on focus the field of physics as a central and binding of all sciences. It is hoped to provide students with working knowledge of some the problems they face in of their everyday life. It is also imparts pleasant experience to students knowing that, phenomenon as complex as the movement of satellites, planets, stars and galaxies are governed with just a very simple law of gravitation.

The course is organized into 7 chapters. The chapters on mechanics introduce the principles and laws governing the motion of objects and the interaction between them as well as conservation laws. The chapter on heat and temperature discusses the interaction between systems through energy transfer and describes some basic thermal properties of such systems. The chapters on oscillations, waves and optics provide basic concepts of periodic motions, how waves transfer energy from one place to the other, and use the concepts of

light rays to explain image formation by mirrors and lenses. Electromagnetism and electronics introduces the basic electric and magnetic phenomena using the concept of field and treats elementary concepts of semiconductors. Cross-cutting applications of physics explain the roles of physics in Agriculture, Industries, Medicine, Archeology, Power Generation, Earth and Space Sciences.

3. Objective of the course

- Develop knowledge and skills in basic measurement and uncertainty.
- Understand the basic concepts of physics and the relations between them (Laws).
- Describe and explain natural phenomena using the basic concepts and laws.
- Apply the basic concepts and laws to practical situations.
- Develop the algebraic skills needed to solve theoretical and practical problems.
- Appreciate the applicability of physics to a wide range of disciplines.

# 4. Course Syllabus

Week	Content	Methods and teaching strategies	Students Task	Learning outcomes
1	1. Physical quantities and basics of Measurement			
	1.1. Basics of Measurement			
	1.1.1 Fundamental units			
	1.1.2 Derived Units			Apply the rules of significant
	1.1.3 Uncertainties and significant figures			figures.
	1.1.4 Adding and multiplying measured quantities			Describe fundamental and derived units
	1.2. Physical Quantities	Lecture	Attend the lesson	Define vector and scalars
	1.2.1 Scalars and Vectors	Lecture	Attend the lesson	Apply the rules of vectors to physical problems
	1.2.1. Representation of a vector	Oral questions	Take notes	
	1.2.2. Unit vector	Group	Active participation	
	1.2.3. Addition of vectors	discussion		
	Algebraic method			
	Geometrical method			
	2. Kinematics and particle dynamics			
2-5	2.1. Kinematics			
	2.1.1 Displacement, velocity and acceleration in			

1D an	nd 2D			
2.1.2	Motion with constant acceleration			
2.1.3	Projectile motion with Free Fall			
2.2. Dynar	nics	Lecture	Attend the lesson	
2.2.1 intera	The concept of forces as a measure of action	Oral questions	Take notes	
2.2.2	Types of forces	Group discussion	Active participation	
2.2.3 applic	Newton's laws of motion and their cation			Describe displacement
2.2.4	Circular motion			velocity and acceleraton Differentiate one
2.2.5 Exam	Newton's law of universal gravitation and ples			dimensional motion and two. Apply the laws to everday
2.2.6 weigh	Kepler's laws, satellite motion and tlessness			experience. Differentiate between force
2.3. Work,	energy and momentum			work and power.
2.3.1	Work and energy			Describe the concept of center of mass.
2.3.2	Linear momentum			
2.3.3 mome	<i>Conservation of energy and linear ntum</i>			
2.3.4	Power			
2.3.5	The concept of center of mass			

6-7	3. Properties of bulk matter and fluid mechanics			
	3.1. Properties of bulk matter			
	3.1.1. Density, specific gravity			
	3.1.2. Modulus of elasticity			
	3.1.3. Young's modulus			Describe the concept of mass
	3.1.4. Shear modulus			density and specific gravity.
	3.1.5. Bulk modulus	Lecture	Attend the lesson	Differentiate between hydrostatics and
	3.2. Fluid mechanics	Oral questions	Take notes	hydrodynamics.
	3.2.1. Variation of pressure with depth	Group	Active participation	Differentiate among the
	3.2.2. Pressure measurements	discussion	Active participation	modulus.
	3.2.3. Archimedes's principle			Describe Archimedes principle
	3.3. Fluid dynamics			Apply the concept of
	3.3.1. Bernoulli's equation			hydrostatic to everyday experience.
				Apply the concept of hydrodynamics to everyday experience.
	Mid exam			
8				

		T		
9-10				
	4. Heat and thermodynamics			
	4.1. Temperature and the zeroth law of thermodynamics			
	4.2. Thermal expansion of solids			Define zeroth law of
	4.3. Heat and the first Law of Thermodynamics			thermodynamics.
	4.3.1. Heat capacity and specific heat			Define first law of
	4.3.2. Change of phase and latent heat	Lecture	Attend the lesson	thermodynamics.
	4.3.3. First law of thermodynamics	Oral questions	Take notes	Describe the latent heat of
	<b>4.3.4.</b> Mechanisms of thermal energy transfer	Group discussion	Active participation	fusion and vaporization
11-12				
	5. Oscillations, waves and geometrical Optics			Define oscillation
	5.1. Simple Harmonic Motion (SHM)			Define SHM
	5.1.2. Definition of oscillations and SHM			Define SHW
	5.1.1. Physical systems executing SHM Having one degree of freedom (simple pendulum, mass-spring)			Describe the properties of waves.
	5.1.2. Basic Characteristics of SHM	Lecture	Attend the lesson	Differentiate between waves and oscillations
	5.1.3. Equation of SHM V			
	5.1.4. Energy in SHM	Oral questions	Take notes	Apply the equation of SHM to everyday experience.
	5.1.5. Driven Oscillations and resonance	Group discussion	Active participation	Differentiate the different

5.2. Wave Characteristics 5.2.1. Wave Formation and propagation 5.2.2. Transverse and longitudinal waves 5.2.3. The Doppler effect 5.3. Image formation 5.3.1. Image formation by flat mirrors 5.3.2. Image formation by Spherical Mirrors		types of waves. Differentiate the different propagation of waves. Describe the difference between mirrors and lenses Describe different types of image formation.
5.3.3. Image formation by thin lenses		
13-14		
6. Electromagnetism and electronics		
6.1. Electric field		
6.1.1. Properties of electric charges		
6.1.2. Coulombs law		
6.1.3. Electric field due to point charge		
6.2. Electric Potential	Lecture Attend	the lesson
6.2.1. Electric potential energy and potential difference	Oral questions Take no	Define electric charges
6.2.2. Relations between potential and electric fi	<i>ld</i> Group Active	Define electric field
6.3. Direct Current Circuits	discussion	Define magnetic field
6.3.1. Electric current		Differentiate between fields

6.3.2.	Resistance and Ohms law	and potentials.
6.3.3.	Equivalent resistance and Kirchhoff's rules	Apply the field and potential formulas to everyday
6.3.4.	Electrical power	experience.
6.4. Magne	etic field	Apply the laws of electrical
6.4.1.	Source of magnetic field.	circuits to everyday
6.4.2.	Properties of magnetic field	experience.
6.5. Electro	omagnetic Induction	Differentiate between
6.5.1.	Magnetic flux	magnetic and electric field
6.5.2.	Faraday's Law of induction	Apply the laws induction.
6.6. Semico	onductor diodes and transistors	Describe the character of
6.6.1. ele	Classification of materials based on ectrical conductivity	diods
6.6.2.	Definition and properties of diodes	Describe transitors
6.6.3.	Diodes characteristics curve	
6.6.4.	Definition and properties of Transistors	
6.6.5. Sy	<i>Types of Transistors and their circuit</i> <i>mbols</i>	

<ul> <li>7. Application of physics</li> <li>7.1. Application in Agriculture.</li> <li>7.1.1. Energy balance concept, energy in soils, moisture Content, Soil densities, Soil moisture characteristics.</li> <li>7.2. Physics and industries.</li> <li>7.2.1. Principle of motor and generator</li> <li>7.3. Physics in health sciences and medical imaging.</li> <li>7.3.1. Radiation and its biological effect, x-ray, MRI, Ultrasound</li> <li>7.4.1. Radioactive dating</li> <li>7.5 Application in earth and space sciences</li> </ul>	Lecture/video Group discussion	Attend the lesson Take notes	Describe applications of physics to: Electrical energy Energy balance and environment Medical industry Seismic exploration and geothermal energy.
<ul> <li>7.3. Physics in health sciences and medical imaging.</li> <li>7.3.1. Radiation and its biological effect, x-ray, MRI, Ultrasound</li> <li>7.4. Physics and Archaeology.</li> </ul>	Group		Energy balance and environment Medical industry
<ul> <li>7.6. Application in power generation.</li> <li>7.6.1. Solar and wind energy, nuclear power plants, hydroelectric power</li> <li>Final exam</li> </ul>			

#### 5. Assessment

Assessment	Continues assessment (Tests, Quizzes, Assignments,)
	<ul> <li>Mid</li></ul>
Course policy	<ul> <li>A student has to:</li> <li>attend at least 85% of the classes.</li> <li>take all continuous assessments and mid Exam.</li> <li>take final examination.</li> <li>respect all rules &amp; regulations of the university.</li> </ul>

## 6. Resources

Serway, R. A. and Vuille, C., 2018, College Physics, 11th ed., Cengage Learning, Boston, USA

University Physics with Modern Physics by Young, freedman and Lewis Ford

Physics for Scientists and Engineers with Modern Physics by Douglas C. Giancoli

Fundamentals of physics by David Halliday, Robert Resnick and Gearl Walker

College Physics by Hugh D. Young Sears Zemansky, 9th edition

Tayal D.C. *Basic Electronics*. 2nd ed. Himalaya Publishing House Mumbai, (1998).

	Approval S	ection	
	Name	Signatur	e Date
Chair Holder's Name			
Department Head's Name			



# BAHIR DAR UNIVERSITY Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management & Sustainable Development

1. Course Information								
Course Title	General Psychology							
Course Code	Psyc1011							
Credit Hrs./ ECTS	Cr Hrs=3         L=3         T=0         P=0         H=7         CP = 5							
Semester	II							
Year	Ι							
Pre-requisites	None							
Target Group	First year DRMSD students							
Status of the Course	Common course							
Instructor's Name and Address								

2. **Course Description:** This course introduces students with an overview of concept of psychology and life skills. More specifically, topics will be covered historical foundations of psychology, Goals of psychology, research methods in psychology, Sensation and Perception ,Memory and Forgetting, motivation and emotion, personality, psychological disorders and psychotherapy Besides, it also introduce students to the core set of life skills, which are important in realizing holistic development of students that is sense of well-being, confidence and academic performance so that they can lead happy, healthy, successful, and productive life.

# 3. **Objectives of the course**

After completion of this course students will be able to:

- Define the concept of psychology
- Compare and contrast the major perspectives in Psychology
- Explain the various research methods in Psychology
- Discuss Concept of sensation and perception
- Explain the process of learning a new behavior from different theoretical basis
- Describe motivational and emotional processes
- Discuss personality theories
- Describe the characteristics of major psychological disorders
- Demonstrate social and interpersonal skills in everyday life.
- Apply knowledge of psychology to one's own life & to develop life skills.

## **4. COURSE CONTENTS**

Week	Contents	Methods and teaching strategies	Students Task	Learning outcomes
Week 1	<ul> <li>Chapter One: Essence of Psychology</li> <li>1.1. Definition of Basic Concepts</li> <li>1.2. Goals of Psychology</li> <li>1.3. Historical Background of Psychology</li> <li>1.4. Theoretical Perspectives in Psychology</li> <li>1.5. Branches of Psychology</li> <li>1.6. Research Methods in Psychology</li> </ul>	Gape lecture Buss group discussion Independent learning	<ul> <li>Attend the lesson</li> <li>Take notes</li> <li>Active participatio n</li> </ul>	<ul> <li>Define meanings of the term psychology</li> <li>Point out the goals of psychology</li> <li>discuss historical and theoretical perspectives of psychology</li> <li>Evaluate the role of psychology in real life situations of human beings</li> </ul>
Week 2 & 3	Chapter Two: Sensation and perception	Gape lecture	• Listen and	• Define meanings of

	<ul> <li>2.1 .The meanings of sensation and perception2.2. The sensory laws: Sensory thresholds and sensory adaption.</li> <li>2.3.Perception</li> <li>2.3.1.Selectivity of perception: Attention</li> <li>2.3.2.From perception</li> <li>2.3.3.Depth perception</li> <li>2.3.4.PerceptualConstancies</li> <li>2.3.5.Perceptual Illusion</li> </ul>	Group discussion Independent learning Question and answering	•	take notes Answer questions Doing home works, Reading assignments	sensation and perception <ul> <li>Discuss</li> </ul> From perception Depth perception Perceptual Constancies Perceptual Illusion
Week 4 & 5	Chapter Three: Learning and its theories 3.1 Definition and characteristics of Learning 3.2 Factors Influencing Learning 3.3 Theories of Learning 3.3.1. Behavioral Theory of Learning 3.3.2. Social Learning Theory 3.3.3. Cognitive Learning Theory	Gape lecture Group discussion Independent learning Role play	•	Attend the lesson Take notes Answer questions Ask questions Doing homeworks/ assignments	<ul> <li>Define concept of learning</li> <li>Identify factors that affect learning</li> <li>Discuss theories of learning</li> <li>Evaluate implications of learning theories</li> </ul>
Week 6	Chapter Four: Memory and Forgetting 4.1 Meaning of Memory 4.1.1. Stages of Memory 4.1.2. Factors Affecting Memory 4.2. Forgetting 4.2.1. Meaning and Concepts of Forgetting 4.2.2.Theories of Forgetting 4.3. Improving Memory	Gape lecture Group discussion Independent learning Question and answering	•	Attend the lesson Take notes Answer questions Ask questions	<ul> <li>Define memory and forgetting</li> <li>Describe the stages of memory</li> <li>State factors affect memory</li> <li>Explain ways of improving memory</li> </ul>
Week 7 & 8	Chapter Five: Motivation and Emotion	Gape lecture	•	Attend the lesson	Define concept of motivation

	<ul> <li>5.1. Motivation</li> <li>5.1.1. Definition and Types of Motivation</li> <li>5.1.2. Theories of Motivation and their Applications</li> <li>5.1.3. Conflict of Motives and Frustration</li> <li>5.2. Emotion</li> <li>5.2.1. Definition of Emotion</li> <li>5.2.2. Components of Emotion</li> <li>5.2.3. Theories of Emotion</li> </ul>	Group discussion Independent learning Role play Question and answering	•	Take notes Answer questions Ask questions Doing home works	<ul> <li>Explain types of motivation</li> <li>Elucidate conflict of motives</li> <li>Define emotion</li> <li>Elaborate frustration</li> <li>Discuss theories of motivation and emotion</li> </ul>
Week 9	Chapter Six :Personality				
	Development				
Week 10	<ul> <li>6.1 meanings of personality</li> <li>6.2 Theories of Personality</li> <li>6.2.1 The psychoanalytic theory of personality</li> <li>6.2.2 The trait theory of personality</li> <li>6.2.3 Humanistic theory of Personality</li> <li>6.2.3 Humanistic theory of Personality</li> <li>7.1 Humanistic theory of Personality</li> <li>7.1 Nature of Psychological Disorders</li> <li>7.2 Causes of Psychological Disorders</li> <li>7.3 Types of Psychological Disorders</li> <li>7.4 Treatment Techniques</li> </ul>	Gape lecture Group discussion Independent learning Gape lecture Group discussion Independent learning	•	Attend the lesson Take notes Attend the lesson Take notes Answer questions	<ul> <li>Define concept of personality</li> <li>Explain theories of personalityExplain conflict of motives</li> <li>Define emotion</li> <li>Elaborate frustration</li> <li>Discuss theories of motivation and emotion</li> <li>Explain nature of Psychological Disorders</li> <li>Elucidate causes of Psychological Disorders</li> <li>Discuss treatment techniques</li> </ul>
Week 10	Chapter Eight: Introduction to Life Skills 8.1. Nature and Definition of Life skills 8.2. Goals of Life Skills 8.3. Components of Life Skills	Gape lecture Group discussion Independent learning	•	Attend the lesson Take notes Answer questions	<ul> <li>define the term life skill</li> <li>explain goals of life skill</li> <li>State components of life skill</li> </ul>
Week 11-	Chapter Nine: Intra-personal and Personal Skills				

Awareness 9.2. Self-Esteem and Self- Confidence 9.3. Self-Control 9.4. Resilience and Coping with	Gape lecture Group discussion	• Attend the lesson	Define self-concept, and related terms
Confidence 9.3. Self-Control	Group discussion		related terms
9.3. Self-Control	Group discussion	<b>-</b> 1	
9.4. Resilience and Coping with	I	Take notes	• Explain stress coping
	Independent	Answer	mechanisms
Stress	learning	<ul> <li>questions</li> </ul>	• Describe features of
9.5. Anger Management			emotional intelligence
9.6. Problem Solving and			
Decision Making			
Chapter Ten: Academic Skills	Brainstorming,	Active	Describe features of tim
10.1. Time Management	gapped Lecture,	-	management
10.2. Note-taking and Study	Buzz Group		• Identify note-taking and
Skills	discussion	-	study skills
10.3. Test-Taking Skill	method	, i i i i i i i i i i i i i i i i i i i	• Explain test anxiety
10.4. Test Anxiety and		- / liswering	coping mechanisms
Overcoming Test Anxiety			
10.5. Goal Setting			
Chapter Eleven: Social Skills			
-		Active	
	Gape lecture	Listening	• Define the term social
, .	Group discussion	<ul> <li>Asking</li> </ul>	skills
		-	• Explain reasons of socia
	Independent	Questions	inclusions and exclusion
	learning	<ul> <li>taking</li> </ul>	
		Notes	• Explain techniques of
11.4. Social Influences and Peer		Notes	overcoming risky
Pressure			behavior
11.5. Assertiveness			
11.6. Conflict and Conflict			
Resolution			
11.8 Overcoming Risky			
Behavior			
	Decision Making Chapter Ten: Academic Skills 10.1. Time Management 10.2. Note-taking and Study Skills 10.3. Test-Taking Skill 10.4. Test Anxiety and Overcoming Test Anxiety 10.5. Goal Setting Chapter Eleven: Social Skills 11.1. Understanding Intercultural Diversity and Diversity Management 11.2. Gender and Social Inclusion 11.3. Interpersonal Communication Skills 11.4. Social Influences and Peer Pressure 11.5. Assertiveness 11.6. Conflict and Conflict Resolution 11.7. Team Work 11.8 Overcoming Risky Behavior	Decision MakingBrainstorming, gapped Lecture, Buzz Group discussion method10.1. Time Management 10.2. Note-taking and Study SkillsBrainstorming, gapped Lecture, Buzz Group discussion method10.3. Test-Taking Skill 10.4. Test Anxiety and Overcoming Test Anxiety 10.5. Goal Settingmethod11.1. Understanding Intercultural Diversity and Diversity Management 11.2. Gender and Social Inclusion 11.3. Interpersonal Communication SkillsGape lecture Group discussion Independent learning11.4. Social Influences and Peer Pressure 11.5. Assertiveness 11.6. Conflict and Conflict Resolution 11.7. Team Work 11.8 Overcoming RiskyBrainstorming, gapped Lecture, Buzz Group discussion method	Decision MakingBrainstorming, gapped Lecture, Buzz Group discussion methodActive Listening Asking Questions Note-taking Mote-taking Musterstans Note-taking10.1. Time Management 10.2. Note-taking and Study Skills 10.3. Test-Taking Skill 10.4. Test Anxiety and Overcoming Test Anxiety 10.5. Goal Setting Chapter Eleven: Social SkillsBrainstorming, gapped Lecture, Buzz Group discussion methodActive Listening11.1. Understanding Intercultural Diversity and Diversity Management 11.2. Gender and Social InclusionGape lecture Group discussion Independent learningActive Listening11.3. Interpersonal Communication SkillsIndependent learningAsking Notes11.4. Social Influences and Peer Pressure 11.5. Assertiveness 11.6. Conflict and Conflict Resolution 11.7. Team Work 11.8 Overcoming Risky BehaviorActive

Asses	<ul> <li>Continues assessment (Test, Quiz, and Group assignment 25%)</li> </ul>					
smen	• Test10%					
t	• Group assignment					
	• Quiz					
	➢ Mid25%.					
	➢ Final exam					
	Total100					
Cours	A student has to:					
e						
policy	- Attend at least 85% of the classes.					
poney	- Take all continuous assessments and mid Exam.					
	- Take final examination.					
	- Respect all rules & regulations of the university.					
6. Instructional resources						

. Instructional resources

General Psychology Module

#### References

Burnard, P. (1989). Teaching interpersonal skills: A handbook of experiential learningfor health professionals. London, UK: Chapman and Hall.

Coon, D. & Mitterer, J.O. (2008). Introduction to psychology: Gateways to mind and behavior (12<sup>th</sup>ed).

New York, NY: McGraw Hill.

Feldman, R.S. (2018). Essentials of understanding psychology (13<sup>th</sup>ed). New York, NY: McGraw Hill. Gray, P. &Bjorklund,

D.F. (2017).*Psychology* (7<sup>th</sup>ed). New York, NY: Worth Publishers.

Haddon, P.F. (1990). Mastering personal and interpersonal skills: Key techniques and personal success

London, UK: Thorogood Ltd.

Hays, J. (2002). Interpersonal skills at work (2<sup>nd</sup>ed). New York, NY: Routledge

Kalat, J.W. (2013). Introduction to psychology (13<sup>th</sup>ed). New York, NY: McGraw Hill.

Lahey, B.B. (2008). Psychology: An introduction (10<sup>th</sup>ed). New York, NY: McGrawHill.

Lilienfeld, S.O., Lynn, S.J., Namy, L.L. & Woolf, N.J. (2017). Psychology: From Inquiry to

Understanding (3<sup>rd</sup>ed). Upper Saddle River, NJ: Pearson Education.

Meyers, D.G. & DeWall, C.N. (2016). Exploring psychology in modules (10<sup>th</sup>ed). New York, NY:

Worth publishers.

Pavord, E. & Donnely, E. (2015). Communication and interpersonal skills (2<sup>nd</sup>ed). Banbury, UK:

Lantern publishing

Weiten, W. (2014). *Psychology:* Themes and variations (briefer version, 9<sup>th</sup>ed). Belmont, CA:

Wadsworth Publishing

Approval Section				
	Name	Signature	e Date	
Chair Holder's Name				
Department Head's Name				

BAHIR DAR UNIVERSITY Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management & Sustainable Development								
	1. Course Information							
<b>Course Title</b>	Physical Fitne	SS						
Course Code	SpSc 1011							
Credit Hrs./ ECTS	P/F	L=1	T = 1	P =1	H = ?	CP = P/F		
Semester	I							
Year	Ι							
Pre-requisites	None							

Target Group	First year DRMSD	students		
Instructor's name				
and address				
Status of the	Common			
course	Common			
2. Course Description	on:			
This course s	erve as an introduction to the	theory and practice of	a variety of exercise de	signed to improve the
health and co	nduct of students. This inclu	ling cardiovascular, fle	xibility, muscular stren	gth endurance and
body compos	itions. The course primary fo	cus on the role that phy	vsical exercise plays in	the promotion of health
and wellness	Stages of changing behavior	, Principles of fitness th	raining, and other preco	ondition are also
included in fl	ne course. In addition, test an	d measurement of each	health related fitness co	omponents are also
				-
included. Alt	imetry, student will develop	physical, social and psy	chological and as well	as skill development.
<ul> <li>Describe bas</li> <li>List at least f</li> <li>Identify the b</li> <li>Describe the</li> <li>Adjust their of</li> <li>Appreciate th</li> <li>Recognized t</li> <li>Engaged in c</li> </ul>	eting this module, you will be ac concepts of physical fitnes our health related physical fit behaviors that promote wellnes principles followed by fitnes characters and interest with on the way of testing each health he response of the body to va onditioning programs which exercises that used to develo	s ness components. ess of individuals. s trainer/trainees while hers while engaged in or related fitness level of rious types of exercise may help to develop he	exercise. individual alth relate fitness.	program.
	th related fitness at an optim		1	
4. Syllabus Compon	ents			
4.1. Course Content	s, Methods & strategies, an	d learning outcomes		
	,	0		Learning objectives:
e				Learning objectives

	പ				Learning objectives:
	IIM				At the end of
Ē	<b>-</b>	<b>Content &amp; sub-contents</b>	<b>Teaching strategies</b>	Learning strategies	this chapter
					students will
					be able to:

Week 1& 2	UNIT 1: Basic concepts of Physical fitness 1.1 Physical fitness 1.1.1. Definition 1.1.2. Factors affecting fitness 1.1.3. components of fitness 1.1.4. Means to develop fitness. - Physical exercise, - activity - games and sport	Brainstorming Class activity Pair discussion Reflections Gapped Lecture	Listen and take notes Doing class activity individually Compare and contrast their work Reflects	<ul> <li>Define physical fitness</li> <li>List at least four factors that affect physical fitness level of individuals.</li> <li>Describe the components of physical fitness</li> <li>Differentiate physical exercise from physical fitness</li> </ul>
Week 3	<ul> <li>Unit 2: Benefits of physical exercise</li> <li>2.1 Why Physical exercise and Wellness?</li> <li>2.2 Behaviors that contribute for Wellness</li> <li>2.3 Physical exercise and hypokinetic disease (coronary heart disease, blood pressure, diabetes, and lower back pain), Cardiovascular disease and others disease (Cancer and Sexually Transmitted Infections)</li> </ul>	Questioning and answering Class activity Pair discussion Group discussion Reflections Gapped Lecture	Asking and answering questions take short notes, Doing class works Participating in pair and group discussions. Reflects Listen and take notes	Describe wellness and its dimensions Describe the behaviors that promote wellness of individuals Identify at least three Hypokinetic disease
	<ul> <li>Chapter 3 : Nutrients and principles of physical training</li> <li>3.1. macro and micronutrients</li> <li>3.2. diet before, during and after exercise</li> <li>3.3. Principles of Fitness training</li> </ul>	-Brainstorming Gapped Lecture - Questioning and answering - Class activity - Pair/ Group discussion - Reflections	-Listen and take short notes, -Asking and answering -Doing class activity -participating in group discussions. -Reflects	Identify the type of food taken before, during and after exercise - Describe the principles of fitness training

	Unit 4	: He	alth	n related physical fitn	ess							
S	3.1. major parts of physical fitness-3.1. major parts of physical fitness-Training prescriptions Objectives and FITT (F-frequency,-I- intensity-Time and T-type of exercise )-3.2. Types of exercise to develop each-health related fitness components-3.3. health related fitness tests-			Imm-BrainstormingAttend the lessonajor parts of physical fitnessGapped Lecture-Listen and takeag prescriptions- Questioning andshort notes,atives and FITT (F-frequency,answering-Asking andasity-Time and T-type of exercise )- Demonstrationanswering questionspes of exercise to develop each- Class activity-Doing class activityrelated fitness components- Pair/ Group-participating inalth related fitness testsdiscussiongroup discussions.				<ul> <li>Explain the parts of fitness training prescriptions</li> <li>Identify at least three exercises that used to develop each heath related fitness components.</li> </ul>				
<ul> <li>3.3.2. Some health related fitness tests</li> <li>3.3.2. Some health related fitness tests</li> <li>- sit and reach test (flexibility)</li> <li>- 2 min step test (cardiorespiratory)</li> <li>- 1 min Push-up test (strength endurance)</li> </ul>									- Relate th level with health, we behavior, a and other o	their Iness, 1ge, sex		
	Practical											
	Unit 5	: Fit	ness	development								
	<b>4.1.</b> pr	econ	ditic	ons for fitness training		- Explar	nation	- Observe			- Demonst	rate
	4.2.	We	orko	outs for better		- Organize		- Imitate		exercises t	hat used to	
.16				respiratory developm		-Demon	stration	- try to perform as		develop each heath		
k 6	4.3.			se for better Flexibi	lity	- Feedba	ack	the	teacher		related fitr	ess
Week 6-16				nance	.1	- Motiva	ation		nonstrate		componen	
2	4.4.			out for muscular streng lurance.	th			-Take feedback		-	their health	
		and	i enc	iurance.							related fitr	
										optimum l	evel.	
	4.2.	Asse	ssm	ent Strategies & Tech	nnique	es and Co	ourse Policy					
	Asse	ess	- Q	uizzes (5 %), Group as	ssignn	nent (theo	retical/present	tation	n = 10%) and	nd Grou	p assignmer	t (practice
	men	t	der	nonstration $= 10\%$ )								_
			-M	id exam (written)	•••••			•••••			25%.	
			- pı	ractical exams (Contin	ues as	sessment	)	•••••			50%	
			-	Flexibility: =	=15 m	arks						
				sit and reach test	nega		0 - 10  cm		- 11cm	+15 cr	n	
				male		narks	8-14 marks	1	5 marks	-		
				narks	5-10 marks		-	15 mai	rks			
				Cardio respi								
				2 min step test	< 10	marks	10-12 marks		3-15 narks	15mar	ks	
				Male	<100	)	100-119	1	20-130	>130 r	ep.	
				Female	<90		90-109	1	10-120	>120 r	ep.	
				Muscular str	rength	n endura	nce = $(15\%)$ ,	·				
	Muscular strength endurance = (15%),											

		1 min Push-up test	< 10 marks	10-12 marks	13-15	15marks				
					marks					
		Male	< 20	20-29	30-39	>40 rep.				
		Female	< 20	20-29	30- 39	>30rep.				
		Good Condu	ict (5%)				-			
	N	<b>DTE:</b> criteria and cond	itions for pract	ical exam are ba	used on interna	ational norms and the	e fitness			
	lev	el of some undergradu	ate students.							
Course policy	<ul> <li>A student has to:</li> <li>Attend at least 85% of the classes.</li> <li>Take all assignments, presentations, demonstrations, mid Exam and continuous assessments.</li> <li>Respect all rules &amp; regulations of the university.</li> </ul>									
4.3 Inst	ruct	ional Resources								
Text boo	ok									
<ul> <li>Scott F., Lisa J., Jonathan H., Althea M., David M., (2018) Concepts of Fitness and Wellness, University System of Georgia, Galileo Open Learning Materials, 2nd Edition Reference</li> </ul>										
<ul> <li>Charles B.Corbin, Gregory J. Weik, William R. Corbin and Karen A. welk (2006) Concepts of Fitness and Wellness, a compressive lifestyle approach, 6th Edition</li> </ul>										
• Tesfayie	Des	salegn (2004)Module	for the course h	ealth and fitnes	s, bahir dar un	iversity sport acade	my			

	Approval Section								
Name     Signature     Date									
Chair Holder's Name									
Department Head's Name									

## Bahir Dar University Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management and Sustainable Development

1. Course Information									
Course Title	Critical Thinkin	Critical Thinking							
Course Code	LoCT 1011								
Credit Hrs./ ECTS	Cr Hrs=3	L=3	Т=0	P=0	H=7	CP=5			
Semester	Ι								
Year	Ι								
Pre-requisites	None								
Target Group	All First Year	Undergraduate	Students						
Status of the Course	Common Cour	rse							
Instructor's Name &Address									

2. Course Description:

Logic and Critical Thinking is an inquiry that takes arguments as its basic objects of investigation. Logic is concerned with the study of arguments, and it seeks to establish the conditions under which an argument may be considered acceptable or good. Critical thinking is an exercise, a habit, a manner of perception and reasoning that has principles of logic as its fulcrum, and dynamically involves various reasoning skills that ought to be human approach to issues and events of life. To think critically is to examine ideas, evaluate them against what you already know and make decisions about their merit. The aim of logic and critical thinking course is to maintaining an 'objective' position. When you think critically, you weigh up all sides of an argument and evaluate its validity, strengths and weaknesses. Thus, critical thinking skills entail actively seeking all sides of an argument evaluating the soundness of the claims asserted and the evidence used to support the claims. This course attempts to introduce the fundamental concepts of logic and methods of logical reasoning. The primary aim of this course is to teach students essential skills of analyzing, evaluating, and constructing arguments, and to sharpen their ability to execute the skills in thinking and writing.

3. Objective of the course

At the end of the course, students should be able to:

- Understand the relationship of logic and philosophy,
- Recognize the core areas of philosophy,
- Appreciate the necessity learning logic and philosophy,
- > Understand basic logical concepts, arguments,
- > Understand deductions, inductiveness, validity, strength, soundness, and cogency,
- Develop the skill to construct sound argument and evaluate arguments;
- Cultivate the habits of critical thinking and develop sensitivity to clear and accurate usage of language;
- Differentiate cognitive meanings from emotive meanings of words,
- Differentiate standard forms of categorical propositions from other types of sentences used in any language,
  - Apply symbols to denote standard forms of categorical propositions to form further logical assertions among them.
    - Develop logical and open-mind that weighs ideas and people rationally;
    - **2** Develop confidence when arguing with others,

☎II ① Demonstrate logical argumentative ability,

1

$\triangleright$											
Develop logical reasoning	skill in their day to day life, and										
Appreciate logical reasoning, disp	Appreciate logical reasoning, disproving mob-mentality and avoid social prejudice.										
Understand the basic concepts and principles of critical thinking.											
> Understand the criterion of good argument.											
> Identify the factors that affect critical thinking.											
Appy critical thinking principles to real life situation.											
4. Syllabus Components											
4.1. Course Contents, Methods & s	strategies, and learning outcor	nes									
	• •										

Argument.	✓ Self-Reading. discussions.
2.5. Factors Affecting Critical Think	Methods and At the end of thinking.
Content & sub-contents 2.6. Relevance of Critical Thinking.	Students Task       • Appreciate the chapter students will be
Chapter I: Introducing Philosophy	✓ Brainstorming       Attend the lesson and       ➤ Understand the critical thinking in
	✓ Gaped Lecture, take short notes, meaning and natertelife
1.1. Introduction Chapter III: Basic Concepts of I	ogic Group ✓ Brainstorming and answering philosophy, • Describe the basic
<b>1.2.</b> Meaning and Definition of philosophy	✓ Gaped Lecture, take short notes, concepts in logic,
<ul><li>3.2 Basic Concepts of Logic</li><li>1.3. Core Branches of Philosophy.</li><li>3.3 Techniques of recognizing arguments</li></ul>	Discussion, questions, Group Asking and answering Differentiate Recognize the core argument from non
1.4. Importance of persons Angianants	✓ ✓ Pair Discussion, ➤ areas of philosophy, Peer-Learning ➤
Philosophy 3.4.1 Deductive Arguments	✓ Participating in group class works Self-Reading. Peer-Learning Peer-Learning
3.4.2 Inductive Arguments	discussions. ✓ Participating in group • Describe deductive necessity learning logic ✓ Self-Reading.
	discussions and philosophy, and inductive
3.5 Evaluation of Arguments Chapter II: Basic Concepts of Critical	✓ Brainstorming Attend the lesson and • Define what criginalients
3.5.1 Evaluating Deductive Argumen Thinking	o algunento
Evaluating Inductive Arguments 2.1. Introduction	<ul> <li>✓ Group ➤ Asking and answering</li> <li>● Be able to critically</li> <li>● Describe principles</li> </ul>
2.2. Meaning and Definition of Critical Thinking.	Discussion, questions, of critical thinking,
2.3. Principles of Critical Thinking.	✓ Pair Discussion, ➤ Formulate their own
2.4. Criterion/Standard of Argument Good	✓ Peer-Learning       ➤       Participating in group       • Identify factorstattarguments         ✓ Peer-Learning       ➤       Participating in group       affect critical

	Chapte	er IV: Logic and Language	~	Brainstorming	$\triangleright$	Attend the lesson and	•	Understand the
	4.1	Introduction	$\checkmark$	Gaped Lecture,		take short notes,		relationship between
	4.2	Logic and Meaning	~	Group	$\triangleright$	Asking and answering		logic and language
	4.2.1	Cognitive and Emotive meaning of		Discussion,		questions,	•	Describe emotive
		Words	$\checkmark$	Pair Discussion,	≻	Doing class works		and cognitive
	4.2.2	Intensional and Extensional Meaning	✓	Peer-Learning	≻	Participating in group		functions of language
6		of Terms	√ √	Self-Reading.		discussions.	•	Describe intensional
8 &	4.3	Logic and Definition		Debate				and extensional
	4.3.1Ty	pes and Purposes of Definition						
ŚŚ	4.3.2	Techniques of Definition						meaning,
Weeks	4.3.2.1	Extensional techniques of Definitions					• ]	Describe types of of definitions and their
	4.3.2.2	Intensional Techniques of Definitions						
	4.4. C.:	and the Latitude Coldinar						respective purpose,
	4.4 Cm	eria for Lexical Definitions					•	Explain methods of
								producing intensional
								and extensional
								definitions.
	Chapte	r V: Informal Fallacies	✓	Brainstorming			•	Define what fallacy
	<b>5.1.</b> Intr	oduction	✓	Gaped Lecture,	≻ <sub>Atte</sub>	nd the lesson and		is
	<b>5.2.</b> Ty	pes of Fallacies: Formal and Informal	$\checkmark$	Group		ake short notes,	•	Explain formal and
~	<b>5.3.</b> Cat	egories of Informal Fallacies		Discussion,	≻	Asking and answering		informal fallacies
13		<b>5.3.1.</b> Fallacies of Relevance	~	Pair Discussion,				
-10 - 10			,			questions,	•	Describe varieties
		<b>5.3.2.</b> Fallacies of Weak Induction	$\checkmark$	Peer-Learning		Doing class works		of informal fallacies
		<b>5.3.3.</b> Fallacies of Presumption	✓	Self-Reading.	۶	Participating in group		
Zeks		5.3.4. Fallacies of Ambiguity	$\checkmark$	Debate		discussions.	•	Be conscious not to
M								

	5.3.5. Fallacies of Grammatical Analogy						commit these
							fallacies in their life.
	Chapter VI : Categorical Propositions			۶	Attend the lesson and	•	Define what
	<b>6.1.</b> Introduction	$\checkmark$	Brainstorming		take short notes,		categorical
	6.2. Categorical Propositions	$\checkmark$	Gaped Lecture,	۶	Asking and answering		proposition is,
	6.2.1. The Components of Categorical	~	Group		questions,	•	Explain standards
	Propositions		Discussion,	۶	Doing class works		and attributes of
	<b>6.2.2.</b> Attributes of Categorical Propositions:	~	Pair Discussion,				
	Quality, Quantity, and Distribution	~	Peer-Learning		Participating in group		categorical
			0		discussions.		proposition,
9	6.2.3. Representing Categorical Propositions	~	Self-Reading.			•	Describe traditional
—16	6.2.3.1. Venn Diagrams	$\checkmark$	Debate				
14							and modern square
	6.2.3.2. Boolean and Aristotelian Square of						
	Oppositions						of opposition
Weeks	Oppositons						
M	<b>6.2.3.3.</b> Evaluating Immediate Inferences:					٠	Understand
	Venn Diagrams and Square of						immediate
	Oppositions						inferences based on
	6.2.3.4. Logical Operations: Conversion,						rules of conversion,
	Obversion, and Contraposition						obversion, and
							contraposition

4.2. Assessment Strategies & Techniques and Course Policy

Assessment	✓ Test10%
	✓ Group (Individual) Assignment10%
	✓ Quiz/Presentation
	✓ Mid 25%.
	✓ Final Exam50%
	✓ Total100%
Course policy	A student has to:
	✓ Attend at least 85% of the classes.
	✓ Take all continuous assessments and mid Exam.
	✓ Take final examination.
	✓ Respect all rules & regulations of the university.

4.3 Instructional Resources

#### <u>Textbooks</u>

- Hurley, Patrick. (2014) A Concise Introduction to Logic, 12th Edition, Wadsworth, Cengage Learning.
- Hurley, Patrick. (2012) <u>A Concise Introduction to Logic</u>, 11th Edition, Wadsworth, Cengage Learning.

## **Reference Books**

 $\geqslant$ 

Copi, Irving M.and Carl Cohen, (1990) Introduction to Logic, New York: Macmillan Publishing Company.

- Damer, Edward. (2005). Attacking faulty reasoning. A practical guide to fallacy free argument. Wadsworth Cengage learning, USA.
- Fogelin, Robert. (1987) <u>Understanding Arguments: An Introduction to Informal Logic</u>, New York: Harcourt Brace Jvanovich Publisher.
- Guttenplan, Samuel: (1991) <u>the Language of Logic</u>. Oxford: Blackwell Publishers
- Stephen, C. (200) <u>the Power of Logic</u>. London and Toronto: Mayfield Publishing Company.
- Simico, N.D and G.G James. (1983) <u>Elementary Logic</u>, Belmont, Ca: Wadsworth Publishing Company.

> Walelign, Emiru, (2009) Freshman Logic, Addis Ababa.

# Approval Section

N	D	
Name Signature	Date	

Assigned Instructor

Chair Holder



## **BAHIR DAR UNIVERSITY** Institute of Disaster Risk Management and Food Security Studies

Program	Disaster R	Disaster Risk Management & Sustainable Development							
Courses code	EMTE101	EMTE1012							
Courses Title	Introductio	on to Emerging T	Technology						
Degree Program	BSc. Disas	ter Risk Manager	nent & Sustainabl	e Develop	ment				
Module name	Common (	Courses							
Module number	M01								
Course Chair									
Instructor/Tutor									
ECTS credit (CP)	3								
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total				
	3	-	-	5	8				
Lecture days, hours & room		•	·						
Tutorial /lab days & hour									
Target group	1 <sup>st</sup> Year D	RMSD Students.							
Year /semester	Year 1 Sen	Year 1 Semester II							
Pre-requisites	None								
Status of the course	Common								

## **Course Description**

This course will enable students to explore current breakthrough technologies in the areas of

Artificial Intelligence, Internet of Things and Augmented Reality that have emerged over the

past few years. Besides helping learners become literate in emerging technologies, the course

will prepare them to use technology in their respective professional preparations.

### **Objective of the course**

Up on the completion of this course students will be able to:

- Identify different emerging technologies
- Differentiate different emerging technologies
- Select appropriate technology and tools for a given task
- Identify necessary inputs for application of emerging technologies

#### **Syllabus Components**

1.1. Course Contents, Methods & strategies, and learning outcomes

Time	Content & sub-contents	Methods &	Students Task	Learning
		Strategies		C

Week 1-2	Chapter 1: Introduction to Emerging Technologies 1.1 Evolution of Technologies 1.1.1 Introduction to Industrial revolution (IR) 1.1.2 Historical Background (IR 1.0, IR 2.0, IR 3.0) 1.1.3 Fourth Industrial Revolution (IR 4.0) 1.2 Role of Data for Emerging Technologies 1.3 Enabling devices and network (Programmable devices) 1.4 Human to Machine Interaction	<ul> <li>Listening</li> <li>Note-taking</li> <li>Brainstorming</li> <li>Reading</li> <li>Individual work</li> <li>Group discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works and home works,</li> <li>Reflects</li> </ul>	Outcomes: At the end of this chapter students will be able to Develop knowledge of IR Identifies programmable device Develop the knowledge how computer interact with machine Develop general knowledge about emerging technologies
Week 3 - 4 We	<ul> <li>1.5 Future Trends in Emerging Technologies</li> <li>Chapter 2: Introduction to Data Science</li> <li>2.1. Overview for Data Science</li> <li>2.1.1. Definition of data and information</li> <li>2.1.2. Data types and representation</li> <li>2.2. Data Value Chain</li> <li>2.2.1. Data Acquisition</li> <li>2.2.2. Data Analysis</li> <li>2.2.3. Data Curating</li> <li>2.2.4. Data Storage</li> <li>2.2.5. Data Usage</li> <li>2.3. Basic concepts of Big data</li> </ul>	<ul> <li>Listening</li> <li>Note-taking</li> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Class work</li> <li>Tutorials</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> <li>Reflects</li> </ul>	<ul> <li>Develop the Knowledge of data science</li> <li>Identify the various data value chain</li> <li>Know how about Big data</li> </ul>

	Chapter 3: Artificial Intelligence (AI)	• Listening	• Attend the lesson	• Develop the
	3.1. Introduction to AI	• Note-taking	• Listen and take	knowledge of AI
	3.1.1. What is AI	Brainstorming	short notes,	• Know how where to
	3.1.2. History of AI	Gapped Lecture	<ul> <li>Asking and</li> </ul>	use AI
	3.1.3. Levels of AI	Group discussion	answering	
	3.1.4. Types of AI	Class work	questions,	
	3.2. Applications of AI	Tutorials	Doing class	
	3.2.1. Agriculture	Reflections	works and home	
	3.2.2. Health	- Reflections	works,	
	3.2.3. Business (Emerging market)		Participating in	
	3.2.4. Education		group	
	3.3. AI tools and platforms		discussions.	
۲ –	(e.g.: scratch/object tracking)		• Reflects	
Week 5 – 7	3.4. Sample application with hands on activity			
Wee	(simulation based)			
	Chapter 4: Internet of Things (IoT)	• Listening	• Attend the lesson	• Develop the general
	4.1. Overview of IoT	• Note-taking	• Listen and take	knowledge of IOT.
	4.1.1. What is IoT?	• Brainstorming	short notes,	• know how IoT
	4.1.2. History of IoT	• Reading	• Asking and	works and where to
	4.1.3. Advantage of IoT	• Individual work	answering	Put on
	4.2. How IoT Works	• Group discussion	questions,	
	4.2.1. Architecture of IoT	• Reflections	• Doing class	
	4.2.2. Device and Network	Gapped Lecture	works and home	
			works,	
	4.3. IOT tools and platforms (e.g.: KAA IoT		Participating in	
	/Device Hive/Zetta/Things Board)		group	
	4.4. Sample application with hands on activity		discussions.	
	(e.g. IOT based smart farming)		• Reflects	
Week 8 – 10				
sek 8				
Wε				

	Chapter 5: Augmented Reality (AR) 5.1. Introduction to AR	<ul><li>Listening</li><li>Note-taking</li></ul>	<ul><li> Attend the lesson</li><li> Listen and take</li></ul>	• Develop the knowledge of AR
Week 11-12	<ul> <li>5.2. Virtual reality (VR), Augmented Reality (AR) vs mixed reality (MR)</li> <li>5.3. Architecture of AR systems.</li> <li>5.4. Application of AR systems (education, medical, assistance, entertainment) workshop-oriented hands demo</li> </ul>	<ul> <li>Brainstorming</li> <li>Reading</li> <li>Individual work</li> <li>Group discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> </ul>	<ul> <li>short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> <li>Reflects</li> </ul>	<ul> <li>Identify and differentiate about VR, AR and MR</li> <li>Develop the knowledge of AR architecture and its Application area.</li> </ul>
Week 13	<ul> <li>Chapter 6: Ethics and professionalism of emerging technologies</li> <li>6.1. Technology and ethics</li> <li>6.2. Digital privacy</li> <li>6.3. Accountability and trust</li> <li>6.4. Treats and challenges</li> </ul>	<ul> <li>Listening</li> <li>Note-taking</li> <li>Brainstorming</li> <li>Reading</li> <li>Individual work</li> <li>Group discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> <li>Reflects</li> </ul>	• Develop general knowledge on ethics and professionalism of emerging technologies

	Chapter 7: Other Emerging	• Listening	• Attend the lesson	• Know how about
	Technologies	• Note-taking	• Listen and take	currently available
	7.1. Nanotechnology	• Brainstorming	short notes,	emerging
		• Reading	• Asking and	technologies
	7.2. Biotechnology	• Individual work	answering	
	7.3. Blockchain technology	Group discussion	questions,	
	7.4. Cloud and quantum computing	• Reflections	<ul> <li>Doing class</li> </ul>	
	7.5. Autonomic computing	• Gapped Lecture	works and home	
	7.6. Computer vision		works,	
	7.7. Embed systems		• Participating in	
	7.8. Cyber security		group	
- 15	7.9. Additive manufacturing (3D Printing)		discussions.	
Week 14 – 15			• Reflects	
/eek	Etc			
14				

1.2. Assessment Strategies & Techniques and Course Policy

1.2.1. Assessments

• Continues assessment (Test (8%), Quiz (8%), Assignment (9%),) ......25%

• Mid......25%.

- - 1.2.2. Course policy

A student has to:

- attend at least 85% of the classes.
- take all continuous assessments and mid Exam.
- take final examination.
- respect all rules & regulations of the university.
- 1.3. Instructional Recourses

Module

Module for the course Introduction to Emerging Technology

# References

Follett, J. (2014). Designing for Emerging Technologies: UX for Genomics, Robotics, and the Internet of Things: . O'Reilly Media

Francesco Corea (2017). Artificial Intelligence and Exponential Technologies: Business Models Evolution and New Investment Opportunities.

Vong, J. &. (2014). Emerging Technologies for Emerging Markets: . Springer Singapore.

Approved By: -

	Full Name	signature	Date
Chair Holder: -			
Department Head:			



## **BAHIR DAR UNIVERSITY** Institute of Disaster Risk Management and Food Security Studies

Program	Disaster R	Disaster Risk Management & Sustainable Development				
Courses code	FLen1012	FLen1012				
Courses Title	Communicat	Communicative English Skills II				
Degree Program	BSc. Disas	ter Risk Manager	ment & Sustainabl	e Develop	ment	
Module name	Common (	Courses				
Module number	M01	M01				
Course Chair						
Instructor/Tutor						
ECTS credit (CP)	3					
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total	
	3	-	•	5	8	
Lecture days, hours & room						
Tutorial /lab days & hour						
Target group	1 <sup>st</sup> Year DRMSD Students.					
Year /semester	Year 1 Semester II					
Pre-requisites	None					
Status of the course	Common					

**Course Description:** This course contains the following contents: Reading, Grammar, Speaking and Writing

# **Course Objectives:** At the end of this course students should be able to:

- develop their proficiency with reading, speaking and writing skills.
- learn vocabularies that are assumed unfamiliar to them.
- develop their knowledge of grammar
- become successful in living a community successfully and endeavor to execute skills to solve problems that may occur in their community;
- develop their speaking and writing abilities in different areas including 'life skills'; and
- learn to read on supplementary readings

Contents and sub contents	Teaching	Total hrs	Delivery time	
	methods		Week	Hrs
Unit I: Life Skills	Gaped lecture		a St. (1, 1, 4, 4)	
Reading passage: The concept of life skills	Question and answer		$1^{\text{st}}$ (1.1-1.4)	6hrs
Grammar: Active and passive voices	Students' participation	15hrs	2 <sup>nd</sup> (1.5-1.7)	6hrs
Speaking	Gap Lecture question and		3 <sup>rd</sup> (1.8 -1.11)	3hrs
Writing	answer &Reflection			
Unit II: Speculations about the future of Science	Gaped		3rd(2.1-2.2)	3hrs
Reading passage: Grassroots attack in bilharzia Grammar: Future Tense	lecture Approach		4 <sup>th</sup> (2.3-2.5)	6hrs
Speaking	Question and answer	18	5 <sup>th</sup> (2.6 - 2.7)	6hrs
	Students'	hrs	$6^{\text{th}}(2.8-2.9)$	2hm
Writing	participation Gap lecture		6 (2.8-2.9)	3hrs
	Question and answer			
Unit III: Environmental protection	Gaped		6 <sup>th</sup> (3.1 - 3.3)	3hrs
Reading: Environmental Challenges: A river run through	lecture Question and		7 <sup>th</sup> (3.4 - 3.10)	6hrs
Grammar: Modal verbs	answer Students		8 <sup>th</sup> (mid exam)	
Speaking	independent			6hrs
Writing	work	27	9 <sup>th</sup> (3.10.1 3.10.6.1)	6hrs 6hrs
		hrs	10 <sup>th</sup> (3.9.2- 3.10.1)	
Unit IV: Indigenous Knowledge	Students'		d	
Reading: A local Pathway to Global Development	engagement		$11^{\text{th}}(4.1-4.2.1)$	6hrs
Grammar: Reported Speech	Gaped lecture	24	12 <sup>th</sup> (4.2.2-4.2.4)	6hrs
Speaking	Problem	hrs		
Writing	Solving Approach Question and		13 <sup>th</sup> (4.2-4.3)	6hrs
	answer		14 <sup>th</sup> ( 4.5-4.6)	6hrs

Unit V: Cultural Heritage Reading: Cultural Heritage What is it? Why is it important Grammar: Relative Clauses Speaking Writing	Gaped lecture Problem Question and answer		
Supplementary Reading	Students'	16 <sup>th</sup> week	
	engagement		

Туре	Mid Exam	FinalExam	Test	Group work In Class
Time and unit	Unit 1-2 7 <sup>th</sup> or 8 <sup>th</sup> week	Unit 3-4 15 <sup>th</sup> or 16 <sup>th</sup> week	Unit 3-4 13 <sup>th</sup> week	Unit2(5 <sup>th</sup> Week and Unit 4 12 <sup>th</sup> week
Mark	30%	50%	10 %	10%



## **BAHIR DAR UNIVERSITY** Institute of Disaster Risk Management and Food Security Studies

Program	Disaster R	Disaster Risk Management & Sustainable Development				
Courses code	Hist 1012			<b>r</b>		
Courses Title	History of Ethiopia and the Horn					
Degree Program	BSc. Disaster Risk Management & Sustainable					
0 0	Development					
Module name	Common					
Module number	M01					
Course Chair						
Instructor/Tutor						
ECTS credit (CP)	3					
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total	
	3	-	-	5	8	
Lecture days, hours & room				1		
Tutorial /lab days & hour						
Target group	1 <sup>st</sup> Year I	<b>DRMSD Studen</b>	its.			
Year /semester	Year 1 Semester II					
Pre-requisites	None					
Status of the course	Common					

**Course Description**:

This course is a common course given to Higher Learning Institutions Students/HLIS. Students will learn about the role of history in human life and goals of studying history. Students will also learn the importance of history in nation building and the making of identity in time and space. This course covers the major historical processes in Ethiopia and the Horn. The course is also concerned with how the sociocultural, religious, economic and political experiences of the past are interwoven in the making of the current Ethiopia and the Horn. It is useful to know how personalities helped change the scenario, and how societies, peoples and the world that we live in have changed over time and its implication for history of Ethiopia and the Horn. It is helpful to understand history as a base for shaping and bettering of the future.

#### **Objectives of the course**

After completing the course, students will be able to:

- -Distinguish meaning, nature and uses of history
- -Identify pertinent sources for the history of the peoples of Ethiopia and the Horn
- -Describe changes & continuities that unfolded in Ethiopia and the Horn
- -Elucidate the causes, courses and consequences of events happened in the region

-Explain the nature of the region's external contacts and their effects

-Appreciate peoples" achievements, heritages and cultural diversities of the region

Sylla	Syllabus Components						
Cour	Course Contents, Methods & strategies, and learning outcomes						
Time	Content & sub-contents	Methods and strategies	Students Task	Learning Outcomes: At the end of this chapter students will be able to:			
	Unit 1: Introduction	Brainstorming	• Attend the lesson and take short	• Describe the			
	1.1. Concepts of History: Meaning, Nature and Uses	<ul><li>Gapped Lecture</li><li>Group discussion</li></ul>	notes,	general concepts of history			
	1.2. Sources & Methods of Historical Study	• Class work	• Asking and answering	• Mention the			
	1.3. Origin and Development of Historiography of Ethiopia and the Horn		<ul><li>questions,</li><li>Doing class works and home works,</li></ul>	<ul> <li>relevant sources for History of Ethiopia and the Horn</li> <li>Explain Ethiopia and the Horn in relation to human</li> </ul>			
	1.4. Introducing and Understanding Ethiopia and the Horn		<ul> <li>Participating in group discussions.</li> </ul>				
	Unit 2: Peoples and Cultures in Ethiopia and the Horn						
	2.1. Human Evolution			evolution and Neolithic			
. 3	2.2. Neolithic Revolution			Revolution			
Week 1-	2.3. The Peopling of the Region						
We	<ul> <li>2.3.1. Languages and Linguistic Processes: Afro- Asiatic Super Family (Cushitic, Semitic &amp; Omotic Families) and Nilo-Saharan (Chari-Nile &amp; Koman families)</li> </ul>						
	2.3.2. Settlement Patterns 2.3.3. Economic Formations						
	2.4. Religion and Religious Processes						
	2.4.1. Indigenous						
	2.4.2. Judaism						
	2.4.3. Christianity						
	2.4.4. Islam						

Week 4&5	<ul> <li>Unit 3: Polities, Economy &amp; Socio-Cultural Processes in Ethiopia &amp; the Horn to end of 13th Century</li> <li>3.1. Evolution of States</li> <li>3.2. Ancient Polities</li> <li>3.2.1. North and Northeast</li> <li>3.2.1.2. Damat</li> <li>3.2.1.3. Axum</li> <li>3.2.1.4. Zagwe</li> <li>3.2.2. East, Central, Southern and Western</li> <li>3.2.2.1. Agaw, Bizamo, Damot, Enaraya, Gafat.</li> <li>3.2.2.2. Muslim Sultanates (Shewa, Ifat, Dawaro, Fatagar, Bali, Hadiya, Arebabani, Shirka, Dera)</li> <li>3.3. External Contacts</li> <li>3.4. Economic Formations (Agriculture, Handicraft, Trade)</li> <li>3.5. Socio-cultural achievements (Architecture, Writing)</li> </ul>	<ul> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Class work</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Mention the various socio-cultural and political achievements in civilizations of the region</li> <li>Trace the origin and developments of states in the region during the ancient period</li> </ul>
Weeks 6&7	<ul> <li>Unit 4: Politics, Economy &amp; Socio-Cultural Processes from Late 13th – the beginning of 16th Century</li> <li>4.1. "Restoration" of the "Solomonic"" Dynasty</li> <li>4.2. Power Struggle, Consolidation, Territorial and Religious Expansion of the Christian Kingdom</li> <li>4.2.1. Succession Problem and the Establishment of Royal Prison</li> <li>4.2.2. Territorial Expansion towards Agaw, Bizamo, Damot, Red Sea, Bete- Israel/"Falasha"</li> <li>4.2.3. Evangelization and Religious Movements</li> <li>4.3. Social, Economic and Political Dynamics of Muslim Sultanates</li> <li>4.3.1. Political Developments in the Muslim Sultanates and the Rise of Adal</li> <li>4.3.2. Trade and the Expansion of Islam</li> <li>4.4. Rivalry between the Christian Kingdom and the Muslim Sultanates</li> <li>4.5. External Relations</li> </ul>	<ul> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Class work</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works and home works,</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Explain the long term effect of the ""Solomonic"" dynasty in the region.</li> <li>Describe the dynamics of the territorial expansion of the Christian kingdom and rivalry between the Christian Kingdom and Muslim Sultanates in the region</li> <li>Discuss the role of foreign relations and interventions from ancient to modern times in Ethiopia and the Horn</li> </ul>

Week 8-10	<ul> <li>Unit 5: Politics, Economy &amp; Socio-Cultural Processes from Early 16th –the End of the 18th Century</li> <li>5.1. Interaction and Conflicts of the Christian Kingdom and the Sultanate of Adal</li> <li>5.2. Foreign Interventions and Religious Controversies</li> <li>5.3. Population Movements</li> <li>5.3.1. Population Movements of the Afar, Somali and Argobba</li> <li>5.3.2. Gadaa System and Oromo Population Movement (1522- 1618)</li> <li>5.4. Interaction and integration across ethnic and religious diversities</li> <li>5.5. Peoples and States in Eastern, Central, Southern and Western Regions</li> <li>5.5.1. Kushitic: Afar, Somali, Oromo, Sidama, Hadya, Kembata, Konso, Gedeo, Burji</li> <li>5.5.2. Semitic: Harari Emirate, Shewa Kingdom, Gurage Polity</li> <li>5.5.3. Omotic: Kaffa, Wolayita, Gamo Gofa, Dawro, Konta, Yem</li> <li>5.5.4. Nilotic: Anuak, Nuer, Berta, Gumuz</li> <li>5.6.1. The Revival of the Christian Kingdom</li> <li>5.6.2. Gondar achievements: architecture, painting, music, literature, urbanization, trade etc.</li> <li>5.6.3. Gondar Political Developments: "Close Door Policy," Reforms, "Byzantine Politics"</li> <li>5.6.4. Major Features of Era of Princes (1769- 1855) and Yejju Dynasty (1786-1853)</li> </ul>		Brainstorming Gapped Lecture Group discussion Class work	• • •	Attend the lesson and take short notes, Asking and answering questions, Doing class works Participating in group discussions.	<ul> <li>Describe the interplay between local developments and foreign influences</li> <li>Examine the role of population movements in shaping the modern Ethiopia and the Horn</li> <li>Explain the major socio-economic, religious &amp; political achievements of Gonder period</li> <li>List the characteristic features and effects of "Zemene Mesafint"</li> <li>Assess the developments in Eastern, Central, Southern &amp; Western parts of Ethiopia &amp; the Horn</li> </ul>
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Week 11-13	<ul> <li>Unit 6: Internal Interactions and External Relations from the 1800–1941</li> <li>6.1. The Nature of Interactions among peoples and states of Ethiopia and the Horn</li> <li>6.1.1. Peoples and sates of Kafa, Wollaitta, Gibe, Leqa, Qabena, Shawa</li> <li>6.1.2. The Role Trade and Trade Routes in the interaction</li> <li>6.2. Power Rivalry</li> <li>6.3. The Making of Modern Empire State (Territorial Expansion, Centralization process)</li> <li>6.4. Modernization Attempts: administration, military, innovation, education, road construction, railway, transportation &amp; communication, constitution</li> <li>6.5. Socio-Economic Issues/Processes: agriculture, disease &amp; famine, trade, slavery, manufacturing</li> <li>6.6. External Relations, Challenges and Threats</li> <li>6.6.1. External Diplomatic Relations and Treaties</li> <li>6. 6. 2. The Major Battles (Meqdela, Gundet, Gura, Dogali, Mattama, Adwa, Maychew)</li> <li>6. 6. 3. Italian Occupation and the Patriotic Resistance</li> </ul>	<ul> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Class work</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Analyze the political process for formation of Modern Ethiopia and the Horn identify the social and economic developments from 1800-1941</li> <li>Appreciate the move towards modernization and the challenges encountered</li> <li>Trace legacies of major battles, victories and the roles of patriots</li> </ul>
Week 14& 15	<ul> <li>Unit 7: Internal Interactions and External Relations from the 1941–1994</li> <li>7.1. Post 1941 Imperial Period</li> <li>7.1. 1. Political Scene: Restoration &amp; Consolidation of Imperial Power and External Relations</li> <li>7.1. 2. Socio-economic Conditions: agriculture &amp; tenancy, famine, factories, education, health, transportation, religion, welfare institutions (idir, iqub)</li> <li>7.1.3. Opposition: Conspiracies, Revolts and Downfall of the Monarchical Regime</li> <li>7.2. The Derg Regime (1974-1991) .</li> <li>7.2. 1. The Rise of Derg and the Political Momentum</li> <li>7.2.2. Attempts at Reforms: Land Reform, Development through Cooperation Campaign, Collectivization, Agricultural Marketing Corporation, Resettlement, Villagization, Literacy</li> <li>7.2. 3. Internal oppositions, Ethio-Somali War, International Changes &amp; End of the Derg</li> <li>7.3. Historical Developments, 1991-1994 (transitional charter: language &amp; identity issues)</li> </ul>	<ul> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Class work</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Explain the socio- economic and political progresses of the post 1941 imperial period</li> <li>Describe the major changes, and challenges that led to the demise of the monarchy</li> <li>Discuss the political momentum, reforms and oppositions during the Derg period</li> <li>Describe the historical developments from 1991-1994</li> </ul>

91-F1YooWint 8: Cross-Cutting Issues in History of Ethiopia and the Horn8.1. The Role of Women in Ethiopian History (economic, political, cultural and social)8.2. Environmental Dynamics: changes and continuities (deforestation, drought, pollution)8.3. Indigenous Knowledge: education, folk medicine, conflict resolution mechanisms (Makabanto, Shimigilinna, Yejoka, Samugnit, Guma, Luwa, Byto, Heer, Seera)		<ul> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Class work</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Mention the role of Women in Ethiopian History</li> <li>Discuss the environmental change in Ethiopia and the Horn across periods</li> </ul>	
Asses	ssment Strate	egies & Techniques and Course Policy			
Assessment       • Continues assessment (Tests, Quizzes, Assignments,)       20%         • Mid					
Course policy       A student has to:         - attend at least 85% of the classes.         - take all continuous assessments and mid Exam.         - take final examination.         - respect all rules & regulations of the university.					

#### **Instructional Resources**

Reference

Abir, Mordechai. Ethiopia and the Red Sea: The Rise and Decline of the Solomonic Dynasty and MuslimEuropean Rivalry in the Region. Frankcass, 1980.

. *Ethiopia: The Era of The Prince; The Challenge of Islam and The Re-unification of The Christian Empire 1769-1855.* Institute of Asian & African Studies the Hebrew University, 1968.

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Alemayehu Haile et al. History of the Oromo to the Sixteenth Century. Finfinne: OCTB, 2006.

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Crabtree J Pam & Campana V. Douglas. Archaeology and Pre-history.

Gebru Tareke. *Ethiopia Power and Protests: The Ethiopian Peasants Revolts in the 20th Century*. Cambridge University Press, 1991. Gadaa Melbaa. *Oromia*. Minneapolis, 1999.

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Pankhrust, Richard. 1997. The Ethiopian Borderlands: Essays in Regional History from Ancient Times to the end of the 18th Century. Red Sea Press.

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### **BAHIR DAR UNIVERSITY**

## Institute of Disaster Risk Management and Food Security Studies

**Department of Disaster Risk Management & Sustainable Development** 

1. Course Information						
Course Title	General Chemist	General Chemistry				
Course Code	Chem. 1012					
Credit Hrs./ ECTS	Cr Hrs=3	L=2	T=0	P=3	H=0	CP=5
Semester	II					
Year	Ι					
Pre-requisites	None					
Target Group     1 <sup>st</sup> Year DRMSD Students.						
Instructor's name and Addres	ss:					

Status of the course: Common

2. Course Description:

The course covers essential ideas in chemistry, measurements and units, classification of matter, composition of substances and solution, chemical reactions, reactions stoichiometry, electronic structure and periodic properties of elements, the chemical bond and molecular geometry, concepts of equilibrium and acid-base equilibrium, basic concepts of organic chemistry and some selected laboratory activities.

3. Objective of the course

Upon completing this module, you will be able to:

- > Recall and summarize the previous High and preparatory School chemistry concepts
- > Ensure readiness and develop interest towards basics of chemistry
- > Understand the basic principles of chemistry concepts
- > List out possible chemical units and composition of matter
- > Predict the type of compounds formed from the elements based on their location in the periodic table
- Discuss about stoichiometry of chemical reactions
- > Understand the quantum mechanical model of an atom and describe the periodic properties of the elements
- Discuss the formation of ionic and covalent bonds
- > Predict the molecular structures of simple compounds using VSEPR theory
- > Explain the dynamic nature of chemical equilibrium and discuss acid-base equilibrium
- > Name and differentiate different organic compounds based on their functional groups
- > Describe the structure and properties of hydrocarbons and their derivatives
- ➤ Grasp the general guidelines of laboratory work
- > Develop the skill of handling and operating some laboratory equipment

> Develop the skill of performing different laboratory activities

4.1. Course Contents, Methods & strategies, and learning outcomes

		Methods and		Learning Outcomes:
Time	Content & sub-contents	strategies	Students Task	At the end of this chapter students will be able to:

Week 1& 2	UNIT 1: Essential Ideas in Chemistry 1.2 Chemistry in Context 1.2.1 Chemistry as the central science 1.2.2 The scientific method 1.2.3 The Domains of Chemistry 1.3 State and classification of matter 1.3.1 State of matter 1.3.2 Classification of matter 1.4 Physical and chemical properties 1.5 Extensive and intensive property 1.6 Measurements and units 1.6.1 SI units 1.6.2 Derived SI units 1.7 Measurement uncertainty 1.7.1 Significant figures in measurement 1.7.2 Significant figures in calculation 1.7.3 Accuracy and Precision 1.8 Conversion factors and dimensional analysis	<ul> <li>Brain-storming</li> <li>Lecture</li> <li>Gapped lecture</li> <li>Group discussions</li> <li>Demonstrati on</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen &amp; take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works &amp; home works,</li> <li>Reflects</li> </ul>	<ul> <li>Describe the scientific method</li> <li>Differentiate hypotheses, theories, and laws</li> <li>Provide examples illustrating macroscopic, microscopic, and symbolic domains</li> <li>Describe the basic properties of each physical state of matter: solid, liquid, and gas</li> <li>Classify matter as an element, compound, homogeneous mixture, or heterogeneous mixture with regard to its physical state and composition</li> <li>Identify properties of matter as extensive or intensive</li> <li>Define accuracy and precision</li> <li>Correctly represent uncertainty in quantities using significant figure</li> <li>Apply proper rounding rules to computed quantities</li> </ul>
Week 2 - 3	<ul> <li>Unit 2: Atoms, Molecules and Ions</li> <li>2.1 Atomic structure and symbolism</li> <li>2.1.1 Chemical symbols and isotopes</li> <li>2.1.2 Atomic mass unit and average atomic mass</li> <li>2.2 Chemical formulas</li> <li>2.3 The periodic table</li> <li>2.3.1 Historical development of the periodic table</li> <li>2.3.2 Classification of elements in the periodic table</li> </ul>	<ul> <li>Brain-storming</li> <li>Lecture</li> <li>Gapped lecture</li> <li>Group discussions</li> <li>Demonstration</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen &amp; take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works &amp; home works,</li> <li>Reflects</li> </ul>	<ul> <li>Define the atomic mass unit and average atomic mass</li> <li>Calculate average atomic mass and isotopic abundance</li> <li>Represent the bonding arrangement of atoms within molecules using structural formulas</li> </ul>

<ul> <li>2.4 Ionic and Molecular compounds</li> <li>2.4.1 Formation of Ionic Compounds</li> <li>2.4.2 Formation of molecular compounds</li> <li>2.5 Chemical nomenclature</li> <li>2.5.1 Ionic compounds</li> <li>2.5.1.1 Compounds</li> <li>2.5.1.1 Compounds</li> <li>Containing only Monatomic Ions</li> <li>2.5.1.2 Compounds</li> <li>Containing Polyatomic Ions</li> <li>2.5.1.3 Compounds</li> <li>Containing a Metal Ion with a Variable Charge</li> <li>2.5.1.4 Ionic Hydrates</li> <li>2.5.2 Molecular compounds</li> <li>2.5.2.1 Compounds</li> </ul>	<ul> <li>Predict the type compound form from elements I on their location within the period table</li> <li>Derive names common types inorganic compounds us systematic app</li> </ul>	ned based n odic for s of sing a
2.5.1.4 Ionic Hydrates		
2.5.2.1 Compounds composed of		
two elements 2.5.2.2 Binary acids Oxyacids		

<ul> <li>Unit 3: Composition of Substances and Solutions</li> <li>3.1 Formula mass and mole concept</li> <li>3.1.1 Formula mass</li> <li>3.1.2 Mole concept</li> <li>3.2 Determining empirical and molecular formulas</li> <li>3.2.1 Percent composition</li> <li>3.2.2 Determination of empirical formulas</li> <li>3.2.3 Determination of molecular formulas</li> <li>3.4 Molarity and other concentration units</li> <li>3.5 Dilution of solution</li> <li>3.6 Percentage (W/W, W/V and V/V)</li> <li>3.7 Mass Percentage</li> <li>3.3.3 Mass-Volume Percentage</li> <li>3.3.3 Mass-Volume Percentage</li> <li>Parts per million (ppm) &amp; Part per billion (ppb)</li> </ul>	<ul> <li>Brain-storming</li> <li>Lecture</li> <li>Gapped lecture</li> <li>Group discussions</li> <li>Demonstration</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen &amp; take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works &amp; home works,</li> <li>Reflects</li> </ul>	<ul> <li>Define the amount unit mole and the related quantity Avogadro's number</li> <li>Explain the relation between mass, moles, and numbers of atoms or molecules, and perform calculations deriving these quantities from one another</li> <li>Compute the percent composition of a compound</li> <li>Determine the empirical and molecular formula of a compound</li> <li>Calculate solution concentrations using molarity</li> <li>Perform dilution calculations using the dilution equation</li> </ul>
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Weeks 4- 5

Week 6-7	Unit 4. Stoichiometry of Chemical Reaction 4.1 Writing and balancing chemical equations 4.1.1 Writing chemical equation 4.1.2 Balancing chemical equation 4.1.3 Equation for ionic reaction 4.2 Classification of chemical reactions 4.2.1 Acid base reactions 4.2.2 Precipitation reactions and solubility rules 4.2.3 Redox reactions 4.3 Reaction stoichiometry	<ul> <li>Brain-storming</li> <li>Lecture</li> <li>Gapped lecture</li> <li>Group discussions</li> <li>Demonstration</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen &amp; take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works &amp; home works,</li> <li>Reflects</li> </ul>	<ul> <li>Write chemical equations in molecular, total ionic, and net ionic formats.</li> <li>Classify chemical reactions as one of three types given appropriate descriptions or chemical equatio</li> <li>Predict the solubility of common inorganic compounds</li> <li>Perform stoichiometric calculations involving mass, moles, &amp; solution molarity.</li> </ul>
	<ul> <li>4.4.2 Percent yield</li> <li>4.5 Quantitative Chemical Analysis</li> <li>4.5.1 Acid-base titration</li> <li>4.5.2 Gravimetric analysis</li> </ul>		•	<ul> <li>theoretical yield &amp; limiting reactants/reagents.</li> <li>Derive the theoretical yield &amp; % yield for a reaction under specified conditions.</li> <li>Describe the fundamental aspects of titrations and gravimetric analysis.</li> </ul>

	<ul> <li>Unit 5: Electronic Structure and Periodic Properties of Elements</li> <li>5.1. Electromagnetic energy</li> <li>5.1.1. The Characteristics of Light</li> <li>5.1.2. Quantization and Photons</li> <li>5.2. The Bohr Model</li> <li>5.3. Development of Quantum theory</li> <li>5.3.1. The quantum mechanical model of an atom</li> <li>5.3.2. Quantum Theory of electrons in atoms</li> <li>5.3.3. The Pauli exclusion principle</li> </ul>	<ul> <li>Brain-storming</li> <li>Lecture</li> <li>Gapped lecture</li> <li>Group discussions</li> <li>Demonstration</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen &amp; take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works &amp; home works,</li> <li>Reflects</li> </ul>	<ul> <li>Explain the wave and particle nature of light</li> <li>Describe the Bohr model of the hydrogen atom.</li> <li>Extend the concept of wave-particle duality that was observed in electromagnetic radiation to matter as well</li> <li>List and differentiate the four quantum numbers that form the basis for completely specifying the state of an electron in an atom</li> </ul>
Week8-9	<ul> <li>5.4. Electronic structure of atoms</li> <li>5.4.1. Orbital energies and atomic structure</li> <li>5.4.2. The Aufbau principle</li> <li>5.4.3. Electronic configuration and the periodic table</li> <li>5.4.4. Electronic configuration of ions</li> <li>5.5. Periodic variation in element properties</li> <li>5.5.1. Variation in covalent radius</li> <li>5.5.2. Variation in ionic radii</li> <li>5.5.3. Variation in ionization energies.</li> <li>5.5.4 Variation in electron affinities</li> </ul>			<ul> <li>Relate electron configurations to element classifications in the periodic table</li> <li>Describe and explain the observed trends in atomic size, ionization energy, and electron affinity of the elements</li> </ul>

	Unit 6. Chemical Bonding and			
Week 9-10	Molecular Geometry         6.1.       Ionic Bonding         6.1.1.       Formation of Ionic Compounds         6.1.2.       Electronic structure of cations and anions         6.2.       Covalent Bonding         6.2.1.       Formation of covalent bonds.         6.2.2.       Polarity of covalent bonds.         6.3.1.       Writing Lewis structures with the octet rule	<ul> <li>Brain-storming</li> <li>Lecture</li> <li>Gapped lecture</li> <li>Group discussions</li> <li>Demonstration</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen &amp; take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works &amp; home works,</li> <li>Reflects</li> </ul>	<ul> <li>Explain the formation of cations, anions, and ionic compounds</li> <li>Describe the formation of covalent bonds</li> <li>Define electronegativity and identify the polarity of covalent bonds</li> <li>Draw Lewis structures depicting the bonding in simple molecules</li> <li>Compute formal charges for atoms in any Lewis structure.</li> <li>Identify the most</li> </ul>
				any Lewis structure.

	<ul> <li>6.4.3. Resonance</li> <li>6.5. Strengths of ionic and covalent bonds</li> <li>6.5.1. Ionic bond strength and lattice energy</li> <li>6.5.2. Bond strength of covalent bond</li> <li>6.6. Molecular structure and polarity</li> <li>6.6.1. Valence shell electron pair repulsion theory (VSEPR)</li> <li>6.6.2. Molecular structure and dipole moment</li> </ul>			<ul> <li>Explain the concept of resonance and draw Lewis structures representing resonance forms for a given molecule</li> <li>Compute lattice energies for ionic compounds using Born-Haber cycle</li> <li>Predict the structures of molecules using valence shell electron pair repulsion (VSEPR) theory.</li> <li>Explain the concepts of polar covalent bonds and molecular polarity</li> </ul>
Week11-12	<ul> <li>Unit 7. Equilibrium Concepts and Acid-base Equilibrium</li> <li>7.1. Chemical equilibrium</li> <li>7.2. Le Chatelier's principle</li> <li>7.3. Equilibrium calculation</li> <li>7.4. Concepts of acid-base</li> <li>7.4.1. Arrhenius concept</li> <li>7.4.2. Bronsted-Lowery concept</li> <li>7.4.3. Lewis concept</li> <li>7.5. pH and pOH</li> <li>7.6. Relative strengths of acids and bases</li> <li>7.7. Buffers solution</li> </ul>	<ul> <li>Brain-storming</li> <li>Lecture</li> <li>Gapped lecture</li> <li>Group discussions</li> <li>Demonstration</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen &amp; take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works &amp; home works,</li> <li>Reflects</li> </ul>	<ul> <li>Explain the dynamic nature of a chemical equilibrium</li> <li>Predict the response of a stressed equilibrium using Le Châtelier's principle</li> <li>Calculate equilibrium concentrations and equilibrium constants</li> <li>Identify acids, bases based on the three acidbase concepts.</li> <li>Express hydronium and hydroxide ion concentrations on the pH and pOH scales</li> <li>Calculate the pH and pOH of a given solution</li> <li>Determine the relative strengths of acids and bases.</li> <li>Describe the composition and function of acid-base buffer</li> </ul>

- Week 13 - 14	<ul> <li>Unit 8: Organic Chemistry</li> <li>8.1. Hydrocarbons <ul> <li>8.1.1 Alkanes</li> <li>8.1.2 Alkanes</li> <li>8.1.2 Alkynes</li> </ul> </li> <li>8.2 Aromatic Hydrocarbons</li> <li>8.3 Alcohols and Ethers <ul> <li>8.3.1 Alcohols</li> <li>8.3.2 Ethers</li> </ul> </li> <li>8.4 Aldehydes, Ketones, Carboxylic acids and Esters <ul> <li>8.4.1 Aldehydes and Ketones</li> <li>8.4.2 Carboxylic acids and Esters</li> </ul> </li> <li>8.5 Amines and Amides <ul> <li>8.5.1 Amines</li> <li>8.5.2 Amides</li> </ul> </li> </ul>	<ul> <li>Brain-storming</li> <li>Lecture</li> <li>Gapped lecture</li> <li>Group discussions</li> <li>Demonstration</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen &amp; take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works &amp; home works, Reflects</li> </ul>	<ul> <li>Explain the importance of hydrocarbons and the reason for their diversity</li> <li>Name saturated and unsaturated hydrocarbons, and molecules derived from them</li> <li>Describe the reactions characteristic of saturated hydrocarbons</li> <li>Describe the structure and properties of alcohols and ethers</li> <li>Describe the structure and properties of aldehydes, ketones, carboxylic acids and esters.</li> <li>Describe the structure and properties of an amine and amides</li> </ul>
Week 15 16				
4.2. Asse	essment Strategies & Techniques and Course Po	licy		
<ul> <li>Quiz</li> <li>Lab report</li> <li>Mid</li> <li>Final Exam (Lab. Wo</li> </ul>		rk 10% + Theory 40%)		
Course policyA student has to:-Attend at least 85% of the-Attend all laboratory ses-Write report for all laborat-Take all continuous assess-Take final examinationRespect all rules & regulat		ssions tory sessions sments and mid Exam.		
	. R. Chang, General Chemistry: The Es	ssential Concepts, 5 <sup>th</sup>	ed., 2008	

- 2. J.W. Hill and R.H. Petrucci, General Chemistry: An Integrated Approach, 2<sup>nd</sup> ed., 1999.
- Patricia Eldredge, R.H. H and, LLC, General Chemistry-Principles, Patterns, and Applications, 2011. (http://www.saylor.org/books)
- 4. David W. Ball, Introductory Chemistry, Cleveland State University, 2011, (http://www.saylor.org/books)
- 5. J. E. Brady, J. W. Russel and J.R. Holum, General Chemistry: Principles and Structure, 5<sup>th</sup> ed., 2006.
- 6. S. S. Zumdahl and S.A. Zumdahl, Chemistry, 7<sup>th</sup> ed., 2007
- 7. J. McMurry, Organic Chemistry, 8th ed., 20P

	Approval section						
NameSignatureDate							
Chair Holder's							
Department							
Head's							

BAHIR DAR UNIVERSITY Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management & Sustainable Development					
1. Course Information					
Course Title	General Biology				
Course Code	Biol. 1012				
Credit Hrs./ ECTS	Cr Hrs=3	Lecture Hrs. $= 2$	Laboratory Hrs. $= 3$	Total Hrs. $= 5$	CP = 5
Semester	II				
Year	Ι				
Pre-requisites	None				
Target Group	DRMSD First Y	ear Students , Semes	ter II		
Instructor's name and Address:					
Status of the course: Common					
basis of life, basic cl					

taxonomy of organisms, major ecological and natural resource conservation concepts and population and health aspects. The general features of invertebrate and vertebrate animals and the application of biology in different disciplines are also discussed.

# 3. Objective of the course

Upon completing this course, you will be able to:

- $\checkmark$  Explain the scope of biology and molecular basis of life
- ✓ Describe life activities from the cellular point of view
- ✓ Manipulate basic biological tool, record data and draw conclusions
- ✓ Develop scientific attitude, skill and conduct biological experiments using scientific procedures
- ✓ Outline basic processes of energy transduction and synthesis of intermediate or final products in living cells
- ✓ Understand the basic concepts of genetics and inheritance
- ✓ Understand the concepts of infection and immunity
- ✓ Classify organisms based on their cellular organization and complexity
- $\checkmark$  Explain components, processes and interrelationships within a given ecosystem
- $\checkmark$  Know the general features of invertebrate and vertebrate animals
- ✓ Appreciate the practical uses of biological knowledge and its application in the wider society

## 4. Syllabus Components

## 4.1. Course Contents, Methods & strategies, and learning outcomes

Time	Content & sub-contents	Methods and strategies	Students Task	Learning Outcomes: At the end of this chapter students will be able to:
Week 1	<ul> <li>Chapter 1: Introduction</li> <li>1.1 The meaning and scope of biology</li> <li>1.2 The nature and origin of life</li> <li>1.3. Scientific method</li> </ul>	<ul> <li>Introduce biological disciplines</li> <li>Brainstorming</li> <li>Group discussion</li> <li>Asking questions</li> <li>Providing short notes</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing</li> <li>Ask and answer questions</li> </ul>	<ul> <li>Develop positive attitude to words disciplines in biology</li> <li>Describe the scope of biology in solving problems in day ato day life</li> <li>Discuss scientific methods in biology</li> </ul>

Week 2 & 3	Chapter2: Biological Molecules 2.1. Carbohydrates 2.2. Lipids 2.3. Proteins 2.4. Nucleic acids 2.5. Vitamins and coenzymes 2.6. Water 2.7. Minerals	<ul> <li>Introduce the main molecules in life.</li> <li>Brain storming</li> <li>Lecture on the chemical components of each of the seven biological molecules</li> <li>Providing short notes</li> <li>Group discussion</li> <li>Ask questions</li> <li>Laboratory experiments</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing</li> <li>Ask and answer questions</li> <li>Act on laboratory experiments and write reports</li> <li>Develop laboratory ablanced diet for healthy life</li> </ul>
Weeks 4 & 5	<ul> <li>Chapter 3: The cellular basis of life</li> <li>3.1. The cell theory</li> <li>3.2. Cell organelles</li> <li>3.3. Structure and Function of</li> <li>Organelles</li> <li>3.4. Cellular diversity</li> <li>3.5. Transport in cells</li> <li>3.5.1. Nature and structure of</li> <li>biological membranes</li> <li>3.5.2. Membrane permeability and</li> <li>material transport</li> <li>3.5.3. Types of transport in cells</li> <li>(diffusion, osmosis, active transport, bulk transport)</li> <li>3.5.4. Factors affecting membrane</li> <li>permeability</li> </ul>	<ul> <li>Introduce the cell theory and structures</li> <li>Brain storming</li> <li>Lecture on the cell structures and functions, cellular diversity</li> <li>Providing short notes</li> <li>Promote group discussion</li> <li>Ask questions and facilitate expression of the contents of the chapter</li> </ul>	<ul> <li>Attend the lesson         <ul> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing</li> <li>Ask and answer questions</li> <li>laboratory activities to understand cell structure using generalized cells (Fresh mount preparation and observation of plant and animal cells)</li> <li>Explain cell structures and functions</li> <li>Describe the function of cell organelles</li> </ul> </li> </ul>

Week 6 & 7	Chapter 4. Cellular metabolism and Metabolic Disorders 4.1. Cellular metabolism 4.2. Enzymes and their role in Metabolism 4.2.1. Chemical nature of enzymes 4.2.2. Mechanisms of enzyme action 4.2.3. Factors affecting enzyme activity 4.3. Biosynthesis and Bioenergetics 4.3.1. Photosynthesis 4.3.1.1.Photosynthesis 4.3.1.2.Stages of photosynthesis 4.3.2. Biosynthesis of other molecules 4.3.3. Cellular respiration	<ul> <li>Introduce the metabolic processes in cell</li> <li>Brain storming</li> <li>Lecture on the metabolic processes and their products</li> <li>Providing short notes</li> <li>Promote group discussion</li> <li>Ask questions and facilitate</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing questions</li> <li>Ask and answer questions</li> <li>Discuss the normal metabolic processes of cells and factors affecting the normal functioning</li> </ul>
Week 8 & 9	<ul> <li>4.3.3.1. Anaerobic respiration</li> <li>4.3.3.2. Aerobic respiration</li> <li>4.4. Metabolic Disorders, diagnosis and treatments(<i>Diabetes mellitus</i>)</li> <li>5.1. Basic Principles of Mendelian genetics and Patterns of inheritance</li> <li>5.2. Molecular genetics and inheritance</li> <li>5.2.1. DNA, Gene, Chromosomes and Cell division</li> <li>5.2.1. ABO blood groups and Rh Factors</li> <li>5.3. Introduction to Evolution</li> </ul>	<ul> <li>expression of the contents of the chapter</li> <li>Introduce principles of genetics Mendelian Vs Molecular</li> <li>Brain storming</li> <li>Group discussion</li> <li>Lecture on inheritance of characteristics in living things; about DNA, Chromosomes, and Cell division</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing</li> <li>Ask and answer questions</li> <li>Discuss inheritance of characteristics</li> </ul>

	Chanton ( Lafati I l'accord	<b>T</b> ( 1	<ul> <li>Attend the lesson</li> <li>Explain principles</li> </ul>
Week 10 & 11	Chapter 6: Infectious diseases and Immunity 6.1. Principles of infectious diseases 6.2. Types of infectious disease and their causative agent 6.3. Modes of transmission 6.4. Host defenses against infectious diseases 6.5. Adverse immune reactions (responses) 6.6. Tumor Immunolology	<ul> <li>Introduce principles of infectious diseases</li> <li>Brain storming</li> <li>Group discussion</li> <li>Lecture on types of infectious diseases, mode of transmission and immunity</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing</li> <li>Ask and answer questions</li> <li>Ask and answer aguestions</li> <li>Explain principles of infectious infectious diseases mode of transmission and body reaction against diseases</li> </ul>
Week 12	Chapter 7: Taxonomy of organisms 7.1. Early attempts to classify organisms 7.2. Modern Views of Classification (Schemes of Classification) 7.3. Domains of Life and the Hierarchical System of Classification 7.4. Binomial Nomenclature	<ul> <li>Introduce history of taxonomy</li> <li>Brain storming</li> <li>Group discussion</li> <li>Lecture on view of classification hierarchical system of classification, and nomenclature of organisms</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing questions</li> <li>Ask and answer questions</li> <li>Explain principles history of taxonomy</li> <li>Discuss view and hierarchical system of classification as well as nomenclature</li> </ul>
Week 13	Chapter 8: Ecology and conservation of natural resources 8.1. Definition of ecological terms and Basic concepts of Ecology 8. 1.1. Aquatic and terrestrial ecosystems 8.1.2. Flow of energy through the ecosystem 8.1.3. Cycling of materials (nutrients) 8.2. Conservation of natural resources 8.2.1. Principles of conservation 8.3. Environmental Pollution and Public Health	<ul> <li>Introduce ecological terms and basic concepts</li> <li>Brain storming</li> <li>Group discussion</li> <li>Lecture on view of classification hierarchical system of classification, and nomenclature of organisms</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing</li> <li>Ask and answer questions</li> <li>Discuss how to protect the natural ecosystems from destruction and pollution; implication of natural resource conservation to public health and agriculture</li> </ul>

Chapter 9: Introduction to and zoology 9.1 Introduction to Botany 9.1.1.Algology 9.1.2. Bryology and Pteridol 9.1.3. Seed plants 9.2. Introduction to Zoology 9.2.1. Invertebrates 9.2.2. Vertebrates	ogy and structural organization of plants and animals • Brain storming • Group	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing</li> <li>Ask and answer questions</li> </ul>	<ul> <li>Explain botany and zoology</li> <li>Comparative description of simple higher plants; invertebrates and vertebrates</li> </ul>
<ul> <li>Chapter 10: Application of biological sciences</li> <li>10.1. Application of Biology medicine and other health sc (Fast diagnosis tools, drug at vaccine production, gene the immuno-diagnosis, immuno transplantation, medicinal pl 10.2. Application of Biology technology(Application of Biology technology(Application of b concrete strengthening, Envi Engineering, Biosystems En Chemical Engineering, Biosystems En Chemical Engineering, Biosystems In Chemical Engineering, Biosystems I In Chemical Engineering, Biosystems I In Chemical Engineering, I In Ch</li></ul>	<ul> <li>to manupliate organisms for human well being</li> <li>Brain storming</li> <li>Group discussion</li> <li>Lecture on application of biology in medicine, engineering, ensors)</li> <li>to manupliate organisms for human well being</li> <li>Brain storming</li> <li>Group discussion</li> <li>Lecture on application of biology in medicine, engineering, agriculture, industry, waste treatment, forensic sciences, and warfare</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Pear idea Sharing</li> <li>Ask and answer questions</li> </ul>	<ul> <li>Explain how to use biological components of this world for human welfare</li> <li>Discuss application of organisms in different sectors</li> </ul>

Assessment	• Test	
	• Quiz	
	• Assignments	
	• Mid	
	• Final Exam	
	Total	
Course policy	A student has to:	
	- Attend at least 85% of the classes.	
	- Take all continuous assessments and mid Exam.	
	- Take final examination.	
	- Respect all rules & regulations of the university.	

Mason, KA, Losos, JB, Singer, SR. (2017). Biology. 11th ed. McGraw-Hill Education, New York.

Solomon, EP, Berg, LR, Martin, DW. (2008). Biology. 8<sup>th</sup> ed. Thomson Higher Education, USA

Urry, LA, Cain, ML, Wasserman, SA. (2017). Pearson Education, Inc. USA.

Biggs, A., Hagins, W.C., Holliday, W.G., Kapicka, C.L., Lundgren, L., Rogers, W.D., Sewer, M.B. and Zike, D. (2008). **Biology**. The McGraw-Hill Companies, Inc., United States of America.

**2.** Campbell N.A., Reece, J.B. and Mitchell L.G. (1999). **Biology**. Benjamin Cummings Publishing Company Inc an imprint of Addison Wesley Longman, Inc, United States of America.

**3.** Eldon D. Enger, Frederick C. Ross and David B. Bailey (2005). Concepts in Biology. 11th ed. Tata Mc Graw-Hill, New Delhi, India.

4. Guttman B.S. and Hopkins III J.W. (1999). Biology. The McGraw-Hill Companies, Inc., United States of America.
5. Keeton , W.T. and Mc Fadden, C.H (1983). Elements of Biological Science. 3rd ed.

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**8.** Raven, P.H. and Jonson, G.B (2011). Biology. 9th ed. McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY 10020

9. Robert, M.B.V. (1986). Biology: A Functional Approach. Thomas Nelson & Sons, Canada.

**10.** Sandra Pennington (2000). Introduction to Genetics. 11th hours (Malden, Mass)

**11.** Starr, C. and Taggart, R. (1987). Biology: the Unity & Diversity of Life. 4th ed. Wadsworth Publishing Company, Belmont, California.

12. Susan Elrod, Ph.D & William Stansfield, Ph.D (2002). Genetics. 4th ed. Tata Mc Graw-Hill, New Delhi, India.
13. Sylvia S. Mader (2001). Biology. 7th ed. Mc Graw-Hill

14. Taylor, D.J., Stout, G.W. Green, N.P.O. and Soper R. (2008). Biological Science, Cambridge University Press, **Proposed lab. Activities for General Biology (Biol.1012**)

Session 1. Basic tools of the Biologist and handling skills

Session 2. Preliminary use of the microscope

Session 3. The cell: structure of generalized cells (Fresh mount preparation and observation of plant and animal cells) Session 4. Testing for biologically important molecules(Carbohydrates, proteins and Lipids )

Session 5. Dialysis, Diffusion and Osmosis

Approval section						
Name Signature Date						
Chair Holder's						
DeptHead's						



# Institute of Disaster Risk Management and Food Security Studies

Department of Disaster Risk Management & Sustainable Development

1. Course Information							
Course Title	Moral and O	Moral and Civic Education					
Course Code	MCiE1012	MCiE1012					
Credit Hrs./ ECTS	Cr Hrs=2	L=2	T=0	P=0	H=6	Cp=4	
Contact Hrs.	2(2 Lecture)	2(2 Lecture)					
Semester	II	П					
Year	Ι	Ι					
Pre-requisites	None						
Target Group	First Year DR	MSD Students					

2. Course Description:

This course is designed for undergraduate students with the aim of producing good citizens. It emphasizes on equipping learners with the necessary civic competence and active participation in public life. It will also help them to exercise their democratic rights and discharging their responsibilities effectively by familiarizing them with necessary civic knowledge and skills. In countries such as ours, where the process of cultivating modern constitutional and democratic values in the minds of citizens is experiencing serious challenges, largely because the country had no established civic culture and partly because these values and principles are not yet well-institutionalized, civics and ethical education remains to be imperative. To this end, the course introduces learners to the basics of civics and ethics, citizenship, morality and the goals of studying civics and ethics. It exposes students to the meanings, foundations, approaches, values and principles of ethics and civic virtue that learners must be equipped with both as citizens and professionals in their encounter with real life situations both to be morally matured and responsible while making decisions and taking actions. The course also elucidate the nature, purpose and forms of state and government, constitution, democracy and human rights, the nature of democratic citizenship, modes of cultivating civic-virtues in our citizens mainly within the context of Ethiopia.

3. Objective of the course

At the end of the course, students should be able to:

- Understand the subject matter of Civics and Ethics;
- Cultivate certain moral values and civic virtues that enable them to be morally matured and competent in their professional and citizenry lives by practically exposing them to moral and civic debates/discussions and engagements.
- Develop such values/ virtues as recognition, appreciation and tolerance towards diversity and also build culture of peace
- Gain knowledge about the theoretical discourses and practices of state, government and citizenship, and their mutual interplay especially in the context of Ethiopia;
- Develop individual and/or collective potential of becoming self-confident citizens who can effectively participate in their legal-political, socio-economic and cultural lives;
- Understand the essences of such values and principles as democracy and human rights, multiculturalism and constitution and constitutionalism with especial reference to Ethiopia;
- Develop analytical and reflective skill of identifying global or national level development, democracy/governance and peace related issues of civics and ethics and then be able to produce or evaluate policies and practices in a civically and ethically responsible manner.

4. Syllabus Components

4.1. Course Contents, Methods & strategies, and learning outcomes

Time	Content & sub-contents	Methods and strategies	Students Task	Learning Outcomes: At the end of this chapter students will be able to:
Week 1& 2	<ul> <li>Chapter I: Understanding Civics and Ethics</li> <li>1.1.Defining Civics, Ethics, Morality and amorality</li> <li>1.2. The Origin and Development of Civics and ethical education</li> <li>1.3. The purpose of civics and ethical education</li> <li>1.4. Citizen: Rights and responsibilities</li> <li>1.5. Competences of good citizen</li> </ul>	<ul> <li>✓ Brainstorming</li> <li>✓ Gaped Lecture,</li> <li>✓ Group Discussion,</li> <li>✓ Pair Discussion,</li> <li>✓ Peer-Learning</li> <li>✓ Self-Reading.</li> <li>✓ Debate</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Describe the concepts Civics, Ethics and morality</li> <li>Explain concepts of good citizens</li> </ul>
Week 3-6	<ul> <li>Chapter II: Approaches to Ethics</li> <li>2.1.Normative ethics</li> <li>2.1.1.Teleological Ethics (Consequentialist) <ul> <li>Hedonism</li> <li>Ethical and psychological Egoism:</li> <li>Epicureanism and Cyrenaicism</li> <li>Social Hedonism: Utilitarianism</li> </ul> </li> <li>2.1.2.Deontological Ethics (Non Consequentialist) <ul> <li>Performance of One's own Duty</li> <li>Devine-based Morality</li> <li>Kant's Categorical Imperative</li> <li>W.D. Ross's Prima Facie duty</li> </ul> </li> <li>2.1.3. Virtue Ethics and Civic Virtues <ul> <li>Basic Principles of Civic Virtues</li> <li>How to be virtuous person?</li> </ul> </li> <li>2.2. Non-Normative Ethics <ul> <li>Meta Ethics</li> <li>Absolutism/Objectivism</li> <li>Relativism/Subjectivism and Conventionalism</li> <li>Naturalism and Non-naturalism</li> </ul> </li> </ul>	<ul> <li>✓ Brainstorming</li> <li>✓ Gaped Lecture,</li> <li>✓ Group Discussion,</li> <li>✓ Pair Discussion,</li> <li>✓ Peer-Learning</li> <li>✓ Self-Reading.</li> <li>✓ Debate</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Describe normative ethics</li> <li>Elaborate teleological and deontological ethics</li> <li>Explain non-normative ethics</li> </ul>

<ul> <li>Chapter III: Chapter three: Ethical decision making and moral judgment</li> <li>3.1 How can we make ethical decisions and actions</li> <li>Ethical principles and values of moral judgment</li> <li>Moral institutions and critical reasoning</li> <li>Rationalization</li> <li>Types of reasoning</li> <li>Ethics and religious faith</li> <li>Testing moral arguments</li> <li>3.2 Thinking ethically: a framework for decision making</li> <li>Fairness and Justice Approach</li> <li>The Common Good Approach</li> <li>The Rights Approach</li> <li>3.3. To Whom or What Does Morality Apply?</li> <li>Religious Morality</li> <li>Morality and Nature</li> <li>Individual Morality</li> <li>Social Morality</li> <li>What Makes an Action Moral?</li> <li>3.5 Why Should Human Beings Be Moral?</li> <li>Argument from Enlightened Self-Interest</li> <li>Argument from Tradition and Law</li> <li>Common Human Needs</li> </ul>	<ul> <li>Brainstorming</li> <li>Gaped Lecture,</li> <li>Group Discussion,</li> <li>Pair Discussion,</li> <li>Peer-Learning</li> <li>Self-Reading.</li> <li>Debate</li> </ul> <ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Identify the moral foundations we base our ethical standards.</li> <li>Identify how good ethical decision made.</li> <li>Understand why we need to be moral.</li> </ul>
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Weeks 9-12	Chapter Four: State, Government and Citizenship 4.1. Defining State 4.2. Rival Theories of State The Pluralist State The Capitalist State The Capitalist State The Leviathan State The Patriarchal State A.3. The Role of the State Developmental States Social Democratic (Welfare) States Collectivized States Collectivized States Religious States 4.4. Understanding Government What is Government? Purposes and Functions of Government 4.5. Understanding Citizenship Citizenship in Liberal Thought Citizenship in Liberal Thought Citizenship in Republican Thought Multicultural Citizenship Multicultural Citizenship Ways of Acquiring Citizenship Uways of Acquiring Ethiopian Citizenship Ual Citizenship Statelessness		Brainstorming Gaped Lecture, Group Discussion, Pair Discussion, Peer-Learning Self-Reading. Debate	•	Attend the lesson and take short notes, Asking and answering questions, Doing class works Participating in group discussions.	•	Define state Distinguish the different theories of state Explain the role of state in different perspectives Elaborate the main functions of government Define citizenship Identify the different theories of state Explain ways of gaining and losing citizenship
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Weeks 13-16	<ul> <li>Chapter V: Constitution, Democracy and Human Rights</li> <li>5.1. Constitution and Constitutionalism <ul> <li>Peculiar features of Constitution</li> <li>Major Purpose and Functions of</li> <li>Classification of Constitutions</li> <li>The Constitutional Experience of Ethiopia: pre and post 1931</li> </ul> </li> <li>5.2. Democracy and Democratization <ul> <li>Definitions and Forms of Democracy</li> <li>Views on Democracy: Substantive and Procedural Views</li> <li>Fundamental Values and Principles of Democracy</li> <li>Democratization and Its Waves</li> <li>Major actors in Democratization Process</li> <li>Democracy and Good Governance in Ethiopia</li> </ul> </li> <li>5.3. Human Rights <ul> <li>Definitions and Nature of Human Rights</li> <li>Dimensions of Human Rights</li> <li>The Protection and Promotion of Human Rights</li> <li>The Protection and Promotion of Human Rights</li> <li>Oursight Mechanisms: Institutions</li> </ul> </li> </ul>	<ul> <li>✓ Brainstorming</li> <li>✓ Gaped Lecture,</li> <li>✓ Group Discussion,</li> <li>✓ Pair Discussion,</li> <li>✓ Peer-Learning</li> <li>✓ Self-Reading.</li> <li>✓ Debate</li> </ul>	<ul> <li>Attend the lesson and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class works</li> <li>Participating in group discussions.</li> </ul>	<ul> <li>Discern the deference between constitution and constitutionalis m</li> <li>Describe the major functions of type of constitution</li> <li>Explain the traditional and written constitutional experience of Ethiopia</li> <li>Elaborate the views on democracy</li> <li>Identify the basic features of human rights</li> </ul>
Assessm			7%	
	<ul> <li>Test</li> <li>Group Assignment</li> <li>Mid -Exam</li> <li>Final Exam</li> <li>Total</li> </ul>		8% 10% 25%. 50%	
Course	policy A student has to: - Attend at least 85% of the cla - Take all continuous assessmen - Take final examination.			

- Respect all rules & regulations of the university.

4.3 Instructional Resources

# <u>References</u>

- > Alexander, Larry (eds.).(1998). Constitutionalism: Philosophical Foundations. Cambridge: Cambridge University Press.
- Assefa Fisseha. (2006). Federalism and Accommodation of Ethnic Diversity in Ethiopia: Comparative Study. Utrecht: Wolf Legal Publishers.
- Charles F. Kettering Foundation. & Harwood Group.1991. Citizens and politics: a view from Main Street America. Dayton, Ohio: The Foundation.
- David S. Oderberg and Timothy Chapel. (2004). Human values, new essays on ethics and natural law palgrave Macmillan, Great Britain.
- Fasil Nahum. 1997. Constitution for a Nation of Nations: The Ethiopian Prospect. Lawrenceville,NJ: Red Sea Publishers.
- > FDRE. (1995). The Constitution of the Federal Democratic of Ethiopia. Federal NegarritGazeta: Addis Abeba
- Francis Snare (1992). The Nature of Moral Thinking. Rutledge, U.S.A and Canada
- > Frechette,S. (1981). Environmental Ethics. U.S.A.: The Boxwood Press.
- Soodin, Robert E. 2005. Reflective Democracy. Oxford University Press: New York.
- James Paul and Clapham .1972. Ethiopian Constitutional Development: A source book. Haile Selassie I university: Addis Ababa.
- Jeavons, T. (1991). Learning for the common good: liberal education, civic education, and teaching about philanthropy. Washington, DC: Association of American Colleges.
- John M.Rist Real Ethics. (2004).Reconsidering the Foundations of Morality Cambridge university press U.K and U.S.A
- Macedo, S. (2000). Diversity and distrust: civic education in a multicultural democracy. Cambridge, Mass: Harvard University Press.
- Melzer, A. M., Weinberger, J., &Zinman, M. R. (1998). Multiculturalism and American Democracy. Lawrence, Kansas: University Press of Kansas.
- Munitz, Milton K., (ed.) (1961). A Modern Introduction to Ethics, The Free Press of Clencoe
- Navia, Luis E. and Kelly, Eugene. (1980). Ethics and the Search for Values, Prometheus Books.
- Niemi, R. G., &Junn, J. (1998). Civic education: what makes students learn? New Haven: Yale University Press.
- Norman, Richard. (1985). The Moral Photospheres: An introduction to Ethics, Oxford, and Clarendon Press.
- Nzongola, Ntalajia and Margaret C. 1998. The State and Democracy in Africa. Asmara: Africa World Press.
- Oppenheim, A. N. (1977). Civic education and participation in democracy: the German case. London; Beverly Hills: Sage.
- Penrose, W. O. (1952). Freedom is ourselves: Legal rights and duties of the citizen as a basis for civic education. Newark: University of Delaware Press.

# **Approval Sheet**

Name	Signature	Date
Instructor		
Chair holder		
Department head		



#### **BAHIR DAR UNIVERSITY**

## Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management & Sustainable Development

6. Course Information						
Course Title	Social Anthropology					
Course Code	Anth1012					
Credit Hrs/ECTS	Cr Hrs = 2	L = 2	T = 0	P = 0	H = 6	CP=4
Contact Hours	2					
Semester	II					
Year	Ι					
Pre-requisites	None					
Target group	DRMSD first ye	ar students	S			
Status of the Course	Common Course					
Instructor's Name and Address						

## 7. COURSE DESCRIPTION

This course is designed to introduce the anthropology of Ethiopian societies and cultures to first year students' of Higher Learning Institutions (HLIs). It covers basic concepts of anthropology such as culture, society and humanity. It also discusses themes including unity and diversity; kinship, marriage and family; indigenous knowledge systems and local governance, identity, multiculturalism, conflict, conflict resolution and peacemaking system; intra and inter-ethnic relations of Ethiopian peoples. In addition, the course explores culture areas of Ethiopia such as plough culture, *Enset* culture and pastoralism. The course further covers marginalized minority and vulnerable groups in terms of age, gender, occupation and ethnicity by taking ethnographic case studies into account and discuss ways of inclusive growth.

# 8. COURSE OBJECTIVES

Upon completion of this course the students will be able to:

- Develop an understanding of the nature of anthropology and its broader scope in making sense of humanity in a global perspective;
- Understand the cultural and biological diversity of humanity and unity in diversity across the world and in Ethiopia;
- Analyze the problems of ethnocentrism against the backdrop of cultural relativism;
- Realize the socially constructed nature of identities & social categories such as gender, ethnicity, race and sexuality;
- Explore the various peoples and cultures of Ethiopia;
- Understand the social, cultural, political, religious& economic life of different ethno linguistic & cultural groups of Ethiopia;
- o Understand different forms marginalization and develop skills inclusiveness;
- Appreciate the customary systems of governance and conflict resolution institutions of the various peoples of Ethiopia;
- Know about values, norms and cultural practices that maintain society together;
- o Recognize the culture area of peoples of Ethiopia and the forms of interaction developed over time

among themselves; and

• Develop broader views and skills to deal with people from a wide variety of socioeconomic and cultural backgrounds.

# 4. EXPECTED LEARNING OUTCOMES

Up on successful completion of this course, students will be able to:

- **<sup>1</sup>** Understand the nature of the discipline of Social Anthropology.
- **<sup>1</sup>** Understand (social) anthological perspectives.
- **<sup>11</sup>** Describe various anthropological theories and concepts.
- **I** Identify basic elements of culture and social life (groups, institutions, organizations, society).
- **#** Explain human cultural diversity.
- **I** Describe theories of race and ethnicity.
- **<sup>1</sup>** Understand multiculturalism and enter-ethnic relations.
- **♯** Apply their knowledge to comprehend their surroundings.

<b>5.</b> S	5. Syllabus Components							
	.1. Course content, methods & strategi	es, and learning ou	tcomes	-				
Time	Contents and sub-contents	Methods and strategies	Student Task	Learning Outcomes: At the end of this chapter students will be able to:				
Week 1, 2, 3, & 4	<ol> <li>Introducing Anthropology and its Subject matter (8 hrs)</li> <li>1.1. Sketching the subject matter, scope and concerns of anthropology.</li> <li>1.1.1. Anthropological imagination: asking questions and seeing the world anthropologically.</li> <li>1.1.2. Defining Features of Anthropology- holism, relativism &amp; comparative perspectives</li> <li>1.1.3. Methods of Research in anthropology: ethnography &amp; ethnographic methods.</li> <li>1.2. Sub-fields of Anthropology: Four Mirrors for Understanding Humanity.</li> <li>1.3. The relation between anthropology and other disciplines.</li> </ol>	<ul> <li>Brainstorming</li> <li>Gaped lecture</li> <li>Group discussion</li> <li>Pair discussion</li> </ul>	<ul> <li>Attending lectures and discussions.</li> <li>Asking and answering questions.</li> <li>Participating in group discussion.</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Define anthropology and social anthropology</li> <li>Describe the subject matter of social anthropology</li> <li>Explain the essence of anthropological perspective</li> <li>Describe research method in social anthropology</li> <li>Explain the relation between social anthropology and other social sciences.</li> </ul>				

		Ι	Γ	1
Week 5, 6, 7, & 8	<ul> <li>2. Culture and Society (8 hrs)</li> <li>2.1. Conceptualizing Culture: What Culture Is and What Culture Isn't?</li> <li>2.2. Characteristics features of culture: what differentiates culture from other traditions?</li> <li>2.3. Aspects of Culture –Material &amp; Non-material (values, beliefs &amp; norms)</li> <li>2.4. Levels of culture: universality, generality and particularity (cultural diversity)</li> <li>2.5. Ethnocentrism, Cultural relativism, and human rights</li> <li>2.6. Cultural Change: what is cultural change?</li> <li>✓ Cultural Diffusion versus Cultural Assimilation</li> <li>✓ Innovation</li> <li>2.7. Culture areas and cultural contacts in Ethiopia:</li> <li>2.7.1.Plough culture area</li> <li>2.7.3. Pastoral societies culture area</li> <li>2.7.4. Historical and social interactions between culture areas</li> </ul>	<ul> <li>Brainstorming</li> <li>Gaped lecture</li> <li>Group discussion</li> <li>Pair discussion</li> </ul>	<ul> <li>Attending lectures and discussions.</li> <li>Asking and answering questions.</li> <li>Participating in group discussion.</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Define the concepts of culture and society.</li> <li>Describe the features of culture.</li> <li>Acquire basic knowledge on the aspects and levels of culture.</li> <li>Describe the attitudes toward cultural variation.</li> <li>Discuss cultural change.</li> <li>Explain cultural diversity.</li> <li>Discuss major anthropological works in the case of Ethiopian societies and cultures</li> </ul>
Week 9 & 10	<ol> <li>Social Organizations and Relationships (4 hrs)</li> <li>Marriage - rules, functions and forms of Marriage</li> <li>Family: types and functions of Family</li> <li>Kinship System: types of kin groups and rules of descent</li> <li>Kinship and Gender Across Cultures</li> <li>Sex and Gender: Mapping differences in cross cultural perspective</li> <li>Gender –as power relations</li> </ol>	<ul> <li>Brainstorming</li> <li>Gaped lecture</li> <li>Group discussion</li> <li>Pair discussion</li> <li>Home work</li> </ul>	<ul> <li>Attending lectures and discussions.</li> <li>Asking and answering questions.</li> <li>Participating in group discussion.</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Define the concept of social organization.</li> <li>Describe family and kinship as forms of social institutions and organizations.</li> <li>Explain the nexus among kinship, sex, and gender.</li> </ul>

4. Religion and Religious Diversity						
<ul> <li>(4 hrs)</li> <li>4.1. The concept of religion</li> <li>4.2. Origin, functions and expressions of religion</li> <li>4.3. Kinds of Religion</li> <li>4.4. Religion and Change:</li> <li>✓ Revitalization and</li> </ul>	Brainstorming Gaped lecture Group discussion Pair discussion Home work	<ul> <li>Attending lectures and discussions.</li> <li>Asking and answering questions.</li> <li>Participating in group discussion.</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Acquire knowledge on the concept of religion.</li> <li>Describe the origin &amp; functions of religion.</li> <li>Describe kinds of religion.</li> <li>Explain religion and change.</li> </ul>			
<ul> <li>5.2. Ethnicity and Race: What's in a name?</li> <li>5.3. Ethnic Groups &amp; Ethnic Identity</li> <li>5.4. Race –the social construction of</li> </ul>	Brainstorming Gaped lecture Group discussion Pair discussion Home work	<ul> <li>Attending lectures and discussions.</li> <li>Asking and answering questions.</li> <li>Participating in group discussion.</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Describe inter-ethnic relations.</li> <li>Discuss the concept of multiculturalism.</li> <li>Describe the perspectives of social theories on ethnicity and race.</li> <li>Explain multiculturalism and inter-ethnic relations in Ethiopia.</li> </ul>			
<ul> <li>Somali, Afar and Tigray;</li> <li>Gedeo and Oromo; Guraghe and Siltie; Amhara and Tigray)</li> <li>6.2. Customary/Local governance systems</li> <li>✓ Ethnographic cases: Oromo Geda; Somali-Gurti; Gamo, Gofa, Wolayita-Woga;</li> </ul>	Brainstorming Gaped lecture Group discussion Pair discussion Home work	<ul> <li>Attending lectures and discussions.</li> <li>Asking and answering questions.</li> <li>Participating in group discussion.</li> <li>Doing class work and homework.</li> </ul>	<ul> <li>Define the concept of indigenous knowledge.</li> <li>Describe indigenous conflict resolution mechanisms in Ethiopia.</li> <li>Discuss customary/local governance systems in Ethiopia.</li> </ul>			
Guraghe-Sera						

	• Continuous Assessment (test. 0. quize 8. assismment, 8) 250/
	• Continuous Assessment (test: 9; quiz: 8; assignment: 8)
Assessment	• Mid Exam
Assessment	• Final Exam 50%
	Total 100%
	A student has to:
	• Attend at least 85% of the classes.
<b>Course policy</b>	• Take all continuous assessments and mid exam.
	• Take final examination.
	• Respect all rules and regulations of the university.

# 5.3. Instructional resources

# Textbooks:

- Ferraro, G. and Andreatta, S. (2010). *Cultural Anthropology: An Applied Perspective*. (8<sup>th</sup> ed.). Belmont, CA: Wadsworth Cengage Learning.
- Guest, K. J. (2016). *Essentials of Cultural Anthropology*. (1<sup>st</sup> ed.). Canada: W. W. Norton & Company, Inc.
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- Pankhurst. R. (1990). *A Social History Ethiopia*. Addis Ababa: Institute of Ethiopian Studies, Addis Ababa University.
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- Shack, William S. (1966). *The Gurage: A People of the Enset Culture*. London: Oxford University Press.
- Smith, C. and Davies, E. (2008). *Anthropology for Dummies*. Indianapolis, Indiana: Wiley Publishing, Inc.

Approval Section					
	Name	Signature	Date		
Chair Holder's Name					
Department Head's Name					



## Bahir Dar University Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management and Sustainable Development

1. Course Information							
Course Title	Inclusivene	Inclusiveness					
Course Code	Incl1012	Incl1012					
Credit Hrs./ ECTS	Cr Hrs=2	L=2	T=0	P=0	H=6	CP=4	
Semester	II	П					
Year	Ι						
Pre-requisites	None						
Target Group     DRMSD first year students							
Instructor's Name and Address:							
Status of the course:	Common						

# 2. Course Description:

Development efforts of any organization need to include and benefit people with various types of disabilities, people at risks of exclusion/discrimination and marginalization, through providing quality education and training, creating equity, accessibility, employability, promoting prosperity, reducing poverty and enhancing peace, stability and creating inclusive society. Unfortunately, this has not been the practice for the majority of people with disabilities and vulnerable groups, due to unfavorable attitude, negligence, inaccessibility and exclusion from all development endeavors. It is obvious that people with disabilities are the large stand most disadvantaged minority in the world. They are about 15 percent of the global population (about one billion people), and 17.6 million in Ethiopia, with most extended families including someone with a disabilities in Ethiopia is an indicator of violating fundamental human rights that undermines their potential/ability to contribute to poverty reduction and economic growth within their household, their community and the country. It is clear that it is not impairment, but the exclusion practices that has contributed for insecurity (conflict), poverty aggravation for persons with disabilities and vulnerabilities, that has highly demanding inclusive practices. Exclusion practices of persons with disabilities have a long history, affecting the life of people with disabilities and the society at large. In the past and even today people have been discriminated due to their disabilities.

Inclusiveness promotes effective developments through full participation of all members of a population, people with disabilities and vulnerabilities, where all are equal contributors of development and equitable beneficiaries. Through inclusive practices, it is possible to identify and remove social and physical barriers so that people with disabilities and vulnerabilities can participate and benefit from all developments. Genuine inclusion of people with disabilities and vulnerabilities allow of them to actively participate in development processes and eliminate dependence syndrome, leads to broader benefits for families and communities, reduces the impacts of poverty, and positively contributes to a country's economic growth, development and ultimately create inclusive society. All stages of development processes of any organization should be inclusive through creating equal access to education, health care services, work and employment, social protection and all development center of human being.

Hence, in this course, the higher education students will learn how to assess, understand and address the needs of persons with disabilities and vulnerabilities; and provide relevant support or seek extra support from experts. He/she also learns how to adapt and implementing services for an inclusive environment that aimed to develop holistic development such as affective, cognitive and

psychosocial skills of the population with disabilities and vulnerabilities. Identification and removal/management of environmental barriers would find a crucial place in the course. The students learn how to give more attention and support for persons with; hearing impairments, visual impairment, deaf-Blind, autism, physical and health impairments, intellectually challenged, emotional and behavior disorders, learning difficulty, communication disorders, vulnerable persons including gifted and talented, and those at risk due to different reason (persons who are environmentally and culturally deprived, abused, torched, abandoned, and orphaned..etc.). All University students should be given the chance to study the specific developmental characteristics of each group of persons with disabilities and vulnerabilities. Furth more, they also identify the major environmental and social barriers that hinder the development of individuals; and come up with appropriate intervention strategies in inclusive settings of their respective professional environment and any development settings where all citizens are equally benefited.

# **3.Objective of the course**

The objective of this course is to develop knowledge, skill and attitude of the learners so that they can provide appropriate services, the tools and strategies that help to create a convenient inclusive environment. This course encourages learners exploring the benefits of collaborating with colleagues to design and implement inclusion an all sphere of life. It also guides the discovery of ways to modify environment as well as services and practices to meet the needs of all persons with disabilities and vulnerabilities in inclusive environment. As a result of reviewing various reading materials, completing the assignments, engaging in related discussions, and strongly workings on activities, towards the completion of the course, the students will be able to:

- Identify the needs and potentials of persons with disabilities and vulnerabilities.
- Identify environmental and social barriers that hinder the needs, potentials and full participations, in all aspects of life of persons disabilities and vulnerabilities
- Demonstrate desirable inclusive attitude towards all persons with disabilities and vulnerabilities in full participations
- Apply various assessment strategies for service provisions for evidence-based planning and implementation to meet the needs of persons with disabilities and vulnerabilities
- Adapt environments and services according to the need and potential of the persons with disabilities and vulnerabilities
- Utilize appropriate assistive technology and other support mechanisms that address the needs of persons with disabilities and vulnerabilities
- Respect and advocate for the right of persons with disabilities and vulnerabilities
- Collaboratively work with special needs experts and significant others for the life success of all persons with disabilities and vulnerabilities in every endeavor and in all environments.
- Create and maintain successful inclusive environment for persons with disabilities and vulnerabilities
- Promote the process of building inclusive society
- 4. Syllabus Components

4.1. Course Contents, Methods & strategies, and learning outcomes

Time	Content & sub-contents	Methods and strategies	Students Task	Learning Outcomes: At the end of this chapter students will be able to:
Week 1-3	Chapter 1: Understanding Disabilities and Vulnerabilities 1.9 Definitions of disability and vulnerability 1.10Types of disabilities and vulnerabilities 1.11Causes of disability and vulnerability 1.12Historical movements from segregation to inclusion 1.13The effects of attitude on the move towards inclusion 1.14Models of disability	<ul> <li>Listening</li> <li>discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take notes</li> <li>Answer questions</li> <li>Read</li> <li>Doing class works and home works,</li> <li>Reflects</li> </ul>	<ul> <li>Define disability and vulnerability</li> <li>List different types of disabilities and vulnerabilities</li> <li>Explain brief causes of disability and vulnerability</li> <li>Describe the brief historical movements from segregation to inclusion</li> <li>Describe the effect of attitude on the move towards inclusion</li> <li>Discuss models of disability</li> </ul>

Week 4&5	<ul> <li>Chapter 2: Concept of Inclusion</li> <li>2.4 Definition inclusion</li> <li>2.5 Principles of inclusion</li> <li>2.6 Rationale for inclusion</li> <li>2.7 Features inclusive environment</li> </ul>	<ul> <li>Listening</li> <li>Note-taking</li> <li>Brainstorming</li> <li>Gapped Lecture</li> <li>Group discussion</li> <li>Class work</li> </ul>	<ul> <li>Attend the lesson</li> <li>Listen and take short notes,</li> <li>Asking and answering questions,</li> <li>Doing class</li> <li>Define inclusion</li> <li>Discuss the principles of inclusion</li> <li>Discuss the rationale for inclusion</li> <li>Describe inclusive environment</li> </ul>
We	Chapter 3: Identification, Assessment and Differentiated Services	<ul> <li>Tutorials</li> <li>Brainstorming</li> </ul>	<ul> <li>works and home works,</li> <li>Participatin g in group discussions</li> <li>Reflects</li> <li>Attend the lesson</li> <li>Refer to identify the level of disability to the right</li> </ul>
Weeks 6-9	<ul> <li>3.1 Level of disabilities for support</li> <li>3.2 Needs and potentials of persons with disabilities</li> <li>3.3 Needs and potentials of persons with vulnerabilities</li> <li>3.4 Assessment and evaluation Availability of legal frameworks in line with inclusion</li> <li>3.5 Assessment and evaluation inclusiveness of the sector plans</li> <li>3.6 Assessment and evaluation attitude towards inclusion</li> <li>3.7 Assessment and evaluation of accessibilities of social and physical environments</li> <li>3.8 Assessment and evaluation of strategies and plans that remove social and physical barriers to facilitate inclusiveness</li> <li>3.9 The components and purpose of differentiated service plans</li> <li>3.10, Assistive technologies and software to enhance inclusion</li> </ul>	<ul> <li>Gapped Lecture</li> <li>Group discussion/c ooperative teaching</li> <li>Class work</li> <li>Reflections</li> <li>Group and individual presentation</li> <li>Field visit</li> <li>Role-play</li> <li>Seminar</li> </ul>	<ul> <li>Asking and answering questions,</li> <li>Group discussion</li> <li>Doing group and individual presentatio ns</li> <li>Participatin g in group discussions , field visits,</li> <li>Reflection</li> <li>Special needs/Inclu sive education n</li> <li>Representatio n</li> <li>Special needs/Inclu sive education experts consultatio n</li> <li>Special needs/Inclu sive education experts consultatio n</li> <li>Use applicable assistive technologies and software to enhance inclusion</li> </ul>

Week 10	<ul> <li>Chapter 4: Promoting Inclusive Culture</li> <li>4.3 Definition of Inclusive Culture</li> <li>4.4 Dimensions of Inclusive culture</li> <li>4.5 Policy related to Inclusive Culture</li> <li>4.6 Building Inclusive Community</li> <li>4.7 Means of Establishing Inclusive Culture</li> <li>4.8 Inclusive Values</li> <li>4.9 Indigenous Inclusive Values and Practices</li> </ul>	<ul> <li>Brainstormi ng</li> <li>Cooperative teaching</li> <li>Group discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> <li>Role-play</li> <li>Individua l/group presentati on</li> </ul>	<ul> <li>Asking and answering questions,</li> <li>Doing individual/group assignment ,</li> <li>Participatin g in group discussions</li> <li>Reflects</li> <li>Expert consultation</li> </ul>	<ul> <li>Define Inclusive Culture</li> <li>Discus the dimensions of Inclusive culture</li> <li>Evaluate policy related to Inclusive Culture</li> <li>Explain the process of building community for inclusive culture</li> <li>Discus approaches of establishing inclusive culture</li> <li>Discuss inclusive values</li> <li>Explore and discuss indigenous inclusive values</li> <li>Evaluate existing inclusive practices</li> </ul>
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Week 11&12	<ul> <li>Chapter 5: Inclusion for Peace, Democracy and Development</li> <li>5.1. Definition of Peace, Democracy and development from the perspective of Inclusiveness</li> <li>5.2. Sources of exclusionary practices</li> <li>5.3. Exclusionary practices in the community</li> <li>5.4. Respectingdiverse needs, culture, values, demands and ideas</li> <li>5.5. Conflict emanated from exclusion</li> <li>5.6. The full participation of the marginalized group of people</li> <li>5.7. The democratic principles for inclusive practices</li> <li>5.8. The importance of inclusion for psychosocial development</li> <li>5.9. The importance of inclusion for peace</li> </ul>	<ul> <li>Brainstorm ing</li> <li>Using cooperativ e learning</li> <li>Individual work and group work</li> <li>Group discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> <li>Role-play</li> <li>Seminar</li> </ul>	<ul> <li>Asking and answering questions,</li> <li>Doing group and individual works,</li> <li>Group discussions</li> <li>Reflection</li> <li>Participation in role play and seminar</li> </ul>	<ul> <li>Define Peace, Democracy and development from the perspective of Inclusiveness</li> <li>Identify sources of exclusionary practices</li> <li>Discuss exclusionary practices</li> <li>Discuss respecting diverse needs, culture, values, demands and ideas</li> <li>Discus conflict emanated from exclusion</li> <li>Explain means and benefits of participation of the marginalized group of people</li> <li>Discuss the democratic principles for inclusive practices</li> <li>Explain the importance of inclusion for psychosocial development</li> <li>Elaborate the importance of inclusion for peace</li> </ul>
Week 13	<ul> <li>Chapter 6: Legal frame work</li> <li>6.1. Components of legal framework</li> <li>6.2. International legal frame works in relation to inclusiveness</li> <li>6.3. National legal frame works in relation to inclusiveness</li> </ul>	<ul> <li>Brainstorm ing</li> <li>Using cooperativ e learning</li> <li>Individual and group assignment</li> <li>Group discussion</li> <li>Reflections</li> <li>Gapped Lecture</li> <li>Role-play</li> <li>Field visit</li> </ul>	<ul> <li>Asking and answering questions,</li> <li>Doing group and individual works and presentatio ns</li> <li>Group discussions</li> <li>Reflection</li> <li>Participatio n in role play and field visit</li> </ul>	<ul> <li>Define the components of legal framework</li> <li>Identify all international and national legal frame works in relation to inclusiveness</li> <li>Discus the legal frameworks and their implementations</li> <li>Exploring the gaps of the legal framework specific to the sector</li> <li>Assess and evaluate persons with disabilities are equally and equitably treated</li> <li>Assess and evaluate the legal frameworks and plans are implemented</li> </ul>

Week 14	Chapter 7 Resources Management for Inclusion 7.1. Resources for inclusion 7.2. Planning for inclusion services	<ul> <li>Brainstorm ing</li> <li>Using cooperativ e learning</li> <li>Interactive lecture</li> <li>Group discussion</li> <li>Reflection assignment</li> </ul>	<ul> <li>Asking and answering questions,</li> <li>Group discussions</li> <li>Reflection</li> </ul>	<ul> <li>Define inclusive resources</li> <li>Explain the need of planning for inclusion services</li> <li>Identify appropriate resources for inclusive development</li> <li>Discus how to develop budget for inclusive services</li> </ul>		
Week 15&16	Chapter 8: Collaborative Partnerships with stakeholders 8.1. Definition of collaboration, partnership and stack holder 8.2. Key elements of successful collaboration 8.3. The benefits and challenges of collaboration for various stakeholders for the success of inclusion 8.4. The strategies for effective co-planning and team working 8.5. Characteristics of successful stockholders' partnerships 8.6. Strategies for community involvement	<ul> <li>Brainstormi ng</li> <li>Using cooperative teaching</li> <li>Interactive lecture</li> <li>Group discussion</li> <li>Reflection assignment</li> <li>Role-play</li> <li>field visit</li> </ul>	<ul> <li>Asking and answering questions,</li> <li>Doing group discussion,</li> <li>Reflection</li> <li>Participatio n in field visit and role-play</li> </ul>	<ul> <li>Define collaboration, partnership and stakeholder</li> <li>Identify key elements of successful collaboration</li> <li>Describe the benefits and challenges of collaboration for various stakeholders for the success of inclusion</li> <li>Discus the strategies for effective co-planning and team working</li> <li>Identify characteristics of successful partnerships</li> <li>Design strategies for community involvement</li> </ul>		
	Assessment Strategies & Techniques and Course P ssment • Test					
<ul> <li>Assignment/group/assignment</li> <li>Quiz</li> <li>Midterm Exam</li> <li>Final Exam</li> <li>Total</li> </ul>		nent				
Course policy       A student has to:         -       attend at least 85% of the classes.         -       take all continuous assessments and mid Exam.         -       take final examination.         -       respect all rules & regulations of the university.						

## Module

Module for the course: Inclusiveness

#### References

- 1. Alemayehu Teklemariam and TemsegenFereja (2011). Special Need Education in Ethiopia: Practice of Special Needs Education around the World. Washington: Gallaudet University Press.
- 2. Alemayehu Teklemariam (2019). Inclusive Education in Ethiopia: WILEY and Blackwell: Singapore
- 3. A Teachers Guide (2001). UNESCO. Inclusive Education and Classroom Practice in Secondary Education (2004).
- 4. Berit H. Johanson and Alemayehu Teklemariam (2006). Towards Special Needs Education as a University Discipline: An Important step on the way to Education for All. In When All Means All. Hakapaino Oy: Helsinki
- 5. TirussewTeferra and Alemayehu Teklemariam (2007). Including the Excluded: Integrating disability into EFA Fast Track Initiative Process and National Education Plans in Ethiopia. World Vision
- 6. MOE (2007). School Improvement Program

- 7. MOE (2010). Special Needs Program strategies implementation guide.
- 8. MOE (Ministry of Education). (2006). Special Needs Education Program Strategy. Addis Ababa
- 9. Understanding and responding to children's need in inclusive classroom (2010). www.european-agency.org
- 10. ዓለማየሁትክለማርያም (2009). በመተባበርመማር፡- አንድለሁሉም፣ ሁሉምለአንድ፣ አዲስአበባ፡- ፋርኢስትአታሚ
- 11. ዓለማየሁትክለማርያም (2011). አካቶትምህርትለምን፣ምን፣ለነማንእንዴት፤ አዲስአበባ፡- ፋርኢስትአታሚ

Approval section							
Name Signature Date							
Instructor's							
Chair Holder's							
Department Head's							

BAHIR DAR UNIVERSITY Institute of Disaster Risk Management and Food Security Studies							
Program	Disaster R	isk Managem	ent an	d Sustainable De	evelop	ment	
Courses code	Drms 2031	l					
Courses Title	Introducti	on to Disaster	Risk	Management			
Degree Program	BSc. in Dis	saster Risk M	anage	ment and Sustair	nable l	Developme	nt
Module name	Conceptual Understanding of Disaster Risk Management						
Module number	03						
Course chair							
Instructor/Tutor							
CP credit (CP)	6						
Contact hours	Lectures	Tutorials seminars	&	Laboratory workshop	&	Home Study	Total
	48	-		-		114	162
Lecture days, hours &		1		1		1	
room							
Tutorial /lab days & hour							
Target group	2 <sup>nd</sup> Year	Disaster Ris	k Ma	nagement and S	Sustai	nable Dev	elopment

	Students
Year /semester	2 <sup>nd</sup> Year, 1 <sup>st</sup> Semester
Pre-requisites	None
Status of the course	Major

## **Course Description:**

The course deals about the fundamentals of disaster management, concepts, definitions and elements of disaster and disaster risk management; multidisciplinary nature of the subject disaster risk management; paradigm shift in disaster risk management understanding and approaches; types of disaster risk management approaches and disaster models

## **Course Objectives:**

At the end of the course students should be able to:

- Understand the basic concepts, nature and issues related to disaster and disaster management
- Understand the fundamentals of disaster and disaster management
- Define key terminologies in disaster risk management
- Understand basic methodologies in disaster risk assessment
- Describe the various approaches of disaster management and disaster models

Schedule	of lecture to	ppics, Activities and readings		
Week	Lecture (hrs)	Conceptual focus	Activities/tasks	Readings
W1-2	6	CHAPTER 1: Introduction to disaster management1.1.Basics Concepts evolving terminologies in Disaster Management1.2.Nature and Scope of Disaster Management1.3.Historical Evolution	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	Handout compiled by the teacher
W3-5	9	<ul> <li>1.4. Classification of Disasters</li> <li>Socio-Natural Disasters</li> <li>Anthropogenic Disasters</li> <li>Technological Disasters</li> <li>1.5 .Elements of disaster management</li> <li>1.6. Disaster as multidisciplinary field</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	
		<ul> <li>1.7. Disaster Risks Trends</li> <li>Global Disaster Risk Trends</li> <li>Costs and Frequency</li> <li>Historical Review of Disasters Trends</li> <li>1.7. Case Studies on Impacts of Disasters</li> <li>Economic</li> <li>Social</li> <li>Environmental</li> <li>Physical Infrastructure</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	Adams, J. 1994. At Risk. UCL Press, London
W6-8	9	CHAPTER 2: DISASTER RISK MANAGEMENT 2.1.Introduction to Disaster Risk Management • Hazards • Disaster Risk • Vulnerability (Types and Causes, Models) • Capacity and Types of Capacity • Level of Capacities		
		<ul> <li>3.2.Meaning and scope of disaster risk management</li> <li>Paradigm shift in disaster risk management</li> <li>HFA and Post HFA framework</li> <li>SDGs, Sendai framework (2015-2030) and</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and	Blaikie, P. 1994. At Risk. Natural Hazards, People's

		<ul><li>Paris agreement</li><li>Development in International protocols</li></ul>	assignment presentation	Vulnerability, and Disasters.
			•	Rutledge,
W9-10	9	3.2 ComponentsofRiskandRiskAssessment-Hazard assessment		London.
		<ul> <li>Vulnerability Assessment</li> <li>Capacity analysis</li> <li>Risk Assessment</li> <li>Multi-Hazard Vulnerability and Risk Assessment</li> <li>Perception and Attitude Assessment</li> <li>Resilience Assessment</li> <li>Concepts and approaches</li> <li>Adaptation and Resilience</li> <li>Linkage between hazards, vulnerability and resilience</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	
		Resilience Frameworks		
W11-13	9	CHAPTER 3: DISASTER MANAGEMENT CYCLE -Pre-disaster phase (prevention, mitigation	Active participation during lecturing, group discussion,	Handout prepared by the teacher
		and preparedness)	take notes from	
		-Disaster phase (Relief-Response)	lecture and	
		-Post disaster phase (Recovery, Rehabilitation and reconstruction)	assignment presentation	
W14-16	9	, , , , , , , , , , , , , , , , , , , ,	•	Handout
w 14-16	9	CHAPTER 4: DISASTER RISK MANAGEMENT APPROACHES AND MODELS 4.1. Approaches to Risk Management -Structural Risk Reduction Strategies -Non-Structural Risk Reduction Strategies including Risk Transfer, -Insurance and Risk Financing <b>4.2.Disaster management models</b> -Disaster continuum model -Pre- during and after disaster model -Pre- during and after disaster model -Expand and stretched disaster model -Livelihood Approaches -Disaster Formula -DRR and others	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	prepared by the teacher

## **INSTRUCTIONAL METHODS**

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation, and field work.

## ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

#### Assessment methods and their value

Quiz	7%
Test	8%
Assignment	
Mid Exam	
Final exam	50%

Grading: is as per the university regulation

## **Course policy**

All students are expected to abide by the code of conduct of students (article 194, 195, 196, 197, 198 and 199, of the Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Since the course does have a number of practical exercises in the laboratory, students are urged to attend every practical session. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

**Cell phones:** Cell phones must be turned off before entering the class as they are disruptive and annoying to all of us in the class. So, please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes.

## **Reference:**

1. Adams, J. 1994. At Risk. UCL Press, London

 Alexander, D. 1993. Natural Disasters. UCL Press, London
 Bryant, E. 1991. Natural Hazards. CUP, Cambridge
 Blaikie, P. 1994. At Risk. Natural Hazards, People's Vulnerability, and Disasters. Rutledge, London.

Approved by:

Name Course Instructo	or /Tutor		Signature	_	
Name Course chair			Signature		
Name Department head	1		Signature		
BAHIR DAR UNIVERSITY Institute of Disaster Risk Management and Food Security Studie				udies	
Program	Disaster Ri	isk Management and S	Sustainable Developm	ent	
Courses code	Geog2022				
Courses Title	Environme	ent and Natural Resou	rces		
Degree Program	BSc in Disa	aster Risk Managemen	nt and Sustainable Dev	velopment	
Module name	SUPPORTI	VE COURSES			
Module number	02				
Course chair					
Instructor/Tutor					
ECTS credit (CP)	5				
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total
	32			49	81
Lecture days, hours,& Mon1-2, Tue 1, B3R1 room					
Tutorial /lab days & hour					
Target group	1 <sup>st</sup> Year Di	saster Risk Manageme	ent and Sustainable D	evelopment Student	s
Year /semester 1 <sup>st</sup> Year, 1 <sup>st</sup> Semester					
Pre-requisites none					
Status of the course	Supportive	9			

#### **Course Description**

Students shall be well grounded in a comprehensive knowledge of the holistic perspective of the environment and natural resources and empowered through analytical techniques and management skills to apply such knowledge to the sustainable management of the environment. It embraces a wide variety of topics from different areas of study,

including among others environment, energy, the Earth systems, human-nature interaction; Environmental problems have a cultural and social context, sustainable development.

## Objectives

At the end of course work, the students will be able to

- Define environmental and natural resources and explain its principles and scope.
- Comprehend how the earth's natural system operate and interrelate with one another.
- Describe how human activities impact natural systems.
- Summarize major environmental and natural resources policies and regulations
- Engage in problem solving of environmental issues.

Weeks	conceptual Focus and contents	Activities/ Task	Reading/Assignments/Discussions
Week	Chapter ONE: BASICS AND CONCEPTS OF	take note from	Andrew, The human impact on the
1	<ul> <li>ENVIRONMENT AND NATURAL RESOURCES</li> <li>Introduction</li> <li>Describe the scope of Environment and natural resources</li> <li>Identify global Environmental problems.</li> <li>Summarize the linkage between Population-resource-environment.</li> <li>Explain how Population size becomes as global environmental challenge.</li> <li>Explain the nexus among Development-resources-sustainability.</li> <li>Identify the Earth materials.</li> </ul>	Lecture , forward any quarries, Group discussion Be able to answer Evaluations, and take assignments <b>Test 1</b>	Natural Environment, Seventh Edition
Week	Chapter Two: The Earth's atmosphere	Quiz 1	
2	<ul> <li>Evolution and composition of the atmosphere</li> <li>Vertical layers of the atmosphere and their characteristics</li> <li>Energy balance of the Earth and its atmosphere</li> <li>Energy flow and consequence of differential energy</li> <li>distribution</li> </ul>		

	CHAPTER Three: ENVIRONMENTAL PLANNING LAW	Answer questions	An introduction to its interior, surface
	<ul> <li>AND POLICY</li> <li>Definitions of terminologies. Concept, evolution, purpose and structure of Environmental Law.</li> <li>International Agreements, Conventions and Treaties in Environmental Law.</li> <li>Environmental Law and International action on Management of Environmental Resources Sectoral and functional environmental laws. The institutionalization of Environmental Policy, planning and management.</li> </ul>	Group discussion Group presentations,	and atmosphere, Cambridge University Press, Year: 2008 Andrew, The human impact on the Natural Environment, Seventh Edition, Hogan, E., Robert, J., Grassi, G., and Bridge water, A. V. (eds.). (1992). "Biomass Thermal Processing. Proceedings of the First Canada/European Community Contractors Meeting." CPL Press, Berkshire, United Kingdom.
Week 3, 4	CHAPTER FOUR: THE ROLE OF FORESTRY	Participate on Presentations, and discussions Be able to answer Evaluations, and take assignments	Andrew, The human impact on the Natural Environment, Seventh Edition "First Biomass Conference of the Americas: Energy, Environment, Agriculture, and Industry," Vols. I–III (1993, 1942). NREL/CP-200-5768,
	IN THE ENVIRONMENT		
	Introduction to socio-economic and		
	ecological roles of forests		
	• Forest cover history of Ethiopia		DE93010050 (and subsequent biennial
	.Natural high forests		books). National Renewable Energy
	<ul><li>.Planted forests</li><li>Woodlands and other vegetation covers</li><li>Importance of forests in Ethiopia</li></ul>		Laboratory, Golden, CO. Klass, D. L. (ed.). (1993). "Energy from Biomass and Wastes XVI (and previous annual books)."
	• Role in national economy		Institute of Gas Technology, Chicago, IL.
	• Role in local economy and socio-culture		
	Ecological roles		
	Chapter Five: Global water Resources	Answer questions	Xu, Y., &Braune, E.
	<ul> <li>The concept of water</li> </ul>	take note from	(2009). Sustainable groundwater
	The hydrosphere	Lecture , forward	resources in Africa: water supply and
	<ul> <li>The hydrologic cycle</li> <li>Distribution (NUC)</li> </ul>	any quarries,	<i>sanitation environment</i> . CRC Press.
	<ul> <li>Distribution of Water Resource</li> </ul>	Group discussion	Kay, B. (Ed.). (2006). Water resources: Health, environment and development. CRC Press.
Week	Chapter Six: Energy and Environment	Participate on	Chris Miller (2001) Planning and
7,8 and	✤ What is energy	Presentations, and	Environmental Protection: A Review
9,10,11	<ul> <li>Energy Concepts</li> </ul>	discussions	of Law and Policy
	<ul> <li>Energy and development</li> </ul>	Be able to answer	
	<ul> <li>Global energy matters</li> </ul>	Evaluations, and	
	Energy sources and trends	take assignments	
	<ul> <li>Historical background and trends</li> <li>Types of renewable energy</li> </ul>	Quiz 2	
	• Types of renewable energy		

	*	Global energy use		
	*	National Energy use status		
	*			
		Future energy needs		
	*	Comparison of renewable and non- renewable energy		
	-	source		
		able energy Resource and its		
	Environmental impact			
	*	Energy Consumption		
	*	Energy Supply		
	*	Environmental and Social Impacts of Energy		
		Production and consumption.		
	*	Energy conservation		
	*	Features of mineral and energy resources		
	*	Features of environmental problems from		
		development of mineral and energy resources		
Week	Chapte	r seven: Soil and Environment	Participate on	Xi, B., Jiang, Y., Li, M., Yang, Y., &
12,13	*	Soil as a Dynamic Body	Presentations, and	Huang, C. (2016). Optimization of
	*	Soil forming factors	discussions	Solid Waste Conversion Process and
	*	Physical properties of soil	Be able to answer	Risk Control of Groundwater
	*	Soil erosion and controlling methods	Evaluations, and	Pollution. Springer.
	*	Deforestation ,land degradation and desertification	take assignments	
			Test 2	
Week	Chapte	r Eight : Cities and Solid Waste Management		Solid Waste Management in the
14,15	*	Waste disposal and management	Field visit,	World's Cities: Water and Sanitation
	*	Hierarchy of integrated solid waste management	Discussion and	in the World's Cities 2010
	*	Sewage disposal and treatment	Report writing	
	*	Hazardous waste		
Week	Presentations of group assignments			
16				

#### METHODOLOGY AND ASSESSMENT

1. **Formal Lecture**: the instructor will Lecture on the most theoretical and practical concepts of the topics and students will be able to develop the required conceptualization and articulation for the topic

**2. Assignments**: Students will form groups, and each group is given topic from the course guide book. The group has a leader who contacts the lecturer and make sure that every member is participating.

3. Each team should make sure that the reviewed concepts have scholarly articulation, reception, critics, and group opinions.

4. Quiz will be administered whenever the lecture feels the necessity of it.

5. Final examination will be given according to the date set on the academic calendar of the university.

VALUES FOR ASSESSMENTS

#### Assessment/Evaluation

Assessment is carried out both as a continuous process during course delivery, which constitutes 50% weight in the total mark and final exam, which constitutes maximum of 50%. The assessment methods involved are summarized as follow:

• Continuous assessment [Quiz, Test results, Group assignment reports, Individual assignment reports, Practical session participation/Field work or visit, Project work and Class activity] Final exam

Test 1 8 %
Quiz 17%
Assignment10%
Mid exam25%
Final exam50%

#### COURSE POLICY

All students are expected to abide by the code of conduct of students (article 194, 195, 196, 197, 198 and 199, of the Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Since the course does have a number of practical exercises in the laboratory, students are urged to attend every practical session. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

**Reference Text book** 

"First Biomass Conference of the Americas: Energy, Environment, Agriculture, and Industry," Vols. I–III (1993, 1942). NREL/CP-200-5768, DE93010050 (and subsequent biennial books).

Andrew, The human impact on the Natural Environment, Seventh Edition

Garg, R. (2006). Ecological and environmental studies

Godish, T. (1997) air quality .New York, USA

Hogan, E., Robert, J., Grassi, G., and Bridgwater, A. V. (eds.). (1992). "Biomass Thermal Processing. Proceedings of the First Canada/European Community Contractors Meeting." CPL Press, Berkshire, United Kingdom.

Hogan, E., Robert, J., Grassi, G., and Bridgwater, A. V. (eds.).(1992). ""Biomass Thermal Processing. Proceedings of the FirstCanada/European Community Contractors Meeting."" CPL Press, Berkshire, United Kingdom. Katyal, T.(2001). Environmental pollution, Delhi India
Miller,G.(1990). Living bin the environment ,an introduction to Environmental Science
Stewart ,T. (1979). Air pollution ,Human Health and public policy. New York
Xi, B., Jiang, Y., Li, M., Yang, Y., & Huang, C. (2016). Optimization of Solid Waste Conversion Process and Risk Control of Groundwater Pollution. Springer.

#### Approved by:

Dr.Zerihun Yohannes

Name, Course Instructor /Tutor

Name, Course chair

Name, Department Head

Signature

Signature

Signature



#### Wildom at the source of the Blue Nile **BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES** Program **Disaster Risk Management and Sustainable Development Courses code Drms 2032 Courses Title** Natural Hazards **Degree Program** BSc. in Disaster Risk Management and Sustainable Development Module name **Conceptual Understanding of Disaster Risk Management** Module number 03 **Course chair** Instructor/Tutor CP credit (CP) 5 **Contact** hours per week Lectures **Tutorials** Total & Laboratory & Home Study seminars workshop **48** 135 -71 -Lecture days, hours & room Tutorial /lab days & hour 2<sup>nd</sup> Year Disaster Risk Management and Sustainable Development **Target group Students** 2<sup>nd</sup> Year, 2<sup>nd</sup> Semester Year /semester **Pre-requisites** None Status of the course Major

#### **Course Description:**

Natural hazards are one of the central facets of disaster causation. As natural processes or phenomenon occurring in the biosphere, these events may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. This course examines the characteristics of various

forms of natural hazards. It explores types, nature and causes of geological, meteorological and biological hazards

#### **Course objectives:**

At the end of the course, students should be able to:

- Understand the significant important of natural hazards and their analysis processes
- Describe the different types of natural hazards which trigger slow and/or rapid on set disasters
- Describe prediction methods, vulnerability factors, adverse effects, risk reduction measures
- Describe the post disaster needs of each natural hazard to human welfare and security.

Week	Lecture (hrs)	Conceptual focus	Activities/tasks	Reading
W1-3	9	<ul> <li>CHAPTER1:INTRODUCTIONTO HAZARDS</li> <li>1.1.Introduction to <ul> <li>Scientific Methods, Principles and logic.</li> <li>Universe, Solar System, Earth</li> <li>Concept of Time, Space, Scale, Matter, Energy, Form and</li> <li>Geomorphic Processes</li> </ul> </li> <li>1.2. Dynamics Earths <ul> <li>Earth's Structure and Composition</li> <li>Plate Tectonics</li> <li>Atmospheric Structure</li> <li>Earth Heat System</li> </ul> </li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and	Alexander, D. 1993. Natural Disasters Keith and Petley ( 2009). Environmental Hazards
W4-6 W7-9	9	<ul> <li>CHAPTER 2: OVERVIEW OF HAZARDS</li> <li>2.1. Meaning, Concepts and Common Categories of Hazards</li> <li>2.2. Basic characteristics of hazards</li> <li>CHAPTER 3.HYDRO- METEOROLOGICAL HAZARDS</li> <li>3.1.Hydro-Metrological systems</li> <li>Overview of Elements of Weather and</li> </ul>	assignment presentation	
		Climate • Hydrological Cycle		

		<ul><li>Metrological System</li><li>Hydro-Meteorological Phenomena</li></ul>		
		<ul> <li>3.2. Hydro-Meteorological Hazards</li> <li>Drought</li> <li>Flood</li> <li>Tropical cyclone</li> <li>Others</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	Leaving behind Disaster: a guide for disaster risk Reduction in Ethiopian context
		CHAPTER 4: GEO- HAZARDS	Active participation during lecturing,	Bryant, E. 1991. Natural Hazards
W10-12	9	Earthquakes     Volcanic Eruptions     land slides     Tsunamis	group discussion, take notes from lecture and assignment presentation	
		CHAPTER 5: BIOLOGICAL HAZARDS		
W12-16	12	<ul> <li>Pest Infestation</li> <li>Epidemics and Pandemics</li> <li>Transmission of biological hazards</li> <li>Risk assessment of biological hazards</li> <li>Controlling exposure to biological hazards</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	

## INSTRUCTIONAL METHODS

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation, and field work.

## ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

## Assessment methods and their value

Quiz	7%
Test	8%
Assignment	10%
Mid Exam	25%
Final exam	50%

Grading: is as per the university regulation

#### **Course policy**

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#### References

- 1. Adams, J. 1994. At Risk. UCL Press, London
- 2. Alexander, D. 1993. Natural Disasters. UCL Press, London
- 3. Bryant, E. 1991. Natural Hazards. CUP, Cambridge
- 4. Blaikie, P. 1994. At Risk. Natural Hazards, People's Vulnerability, and Disasters.

Rutledge, London.

- 5. IRRI and Save USA. 2006. Leaving behind Disaster: a guide for disaster risk Reduction in Ethiopian context
- 6. UNDP, 1992. Introduction to hazards 2<sup>nd</sup> Ed. PP. 168

#### Approved by:

Name Course Instructor /Tutor

Name Course chair

Signature

Signature

Name Department head



## BAHIR DAR UNIVERSITY

### COLLEGE OF AGRICULTURE AND ENVIRONMENTAL SCIENCES

Program	Disaster Risk Management and Sustainable Development						
Courses code	Geol2024	Geol2024					
Courses Title	Earth Scie	Earth Science					
Degree Program	BSc. in	BSc. in Disaster Risk Management and Sustainable					
	Developm	ent					
Module name	Supportiv	e Courses					
Module number	M02						
Course chair							
Instructor/Tutor							
ECTS credit (CP)	4						
Contact hours per week	Lectures	Tutorials	&	Laboratory &	Home	Total	
		seminars		workshop	Study		
	48	-		-	60	108	
Lecture days, hours &	-				•	•	
room							
Tutorial /lab days & hour							
Target group	2 <sup>nd</sup> Ye	ar Disaster	Ris	k Management	and Sus	tainable	
	Developm	ent Students					
Year /semester	2 <sup>nd</sup> 1 <sup>st</sup> Semester						
Pre-requisites	None						
Status of the course	Supportiv	e					

**Description of the course** 

The course "Introduction to Earth's Features and its Dynamics" is prepared for undergraduate students in the department of Disaster Risk Management and Sustainable Development. The purpose of providing this course is letting students to describe and understand the basic features of the earth and its components/resources that interact with human beings in history. After the end of the course, students are expected to relate the process of disaster risk management with physical resources of the earth. The course describes the foundations of Earth Science and its dynamics in the following topics: basics of Earth's resources, Earth's climate, features of surface water, rocks and soil formation, and Earth's Dynamics.

## Objective

The overall objective of the course is enabling students to:

- Understand the nature of the earth;
- Describe/explain internal and external processes in the formation of the earth;
- Understand the internal external forces/factors for Earth's dynamics;
- Appreciate various hypothesis in the formation of the earth;
- Describe/explain the nature of various natural resources and their spatial distribution; and
- Associate the process of disaster risk management with of the geography of the earth.

#### Contents

#### Chapter One: Introduction to the overall features of the earth

#### 1.1 Definition of the earth

1.2 Earth Science and its Sub-Disciplines?

### 1.3 Spheres the Earth

- 1.4 The evolution of the earth
- 1.5 Earth's dating system

#### Chapter Two: Basic features of the planet earth

- 2.1 Shape and Structure
- 2.2 Chemical composition
- 2.3 Landform
- 2.4 The interior of the earth

#### **Chapter Three: Plate tectonic theory**

- 3.1 Earth's tectonic plates
- 3.2 Plate boundaries
- 3.3 How plates move
- 3.4 Hot spots

## **Chapter Four: Rocks and soil formation**

4.1 Types and properties of rocks

- 4.2 Processes in rock formation
- 4.3 Types and properties of soil
- 4.4 Process in soil formation

## Chapter Five: Dynamics of the earth's environment

5.1 Climate: Internal and external forces/processes; Human and natural factors/processes

5.2 Landform: types, properties, responsible internal and external forces/processes; responsible human and natural factors/processes.

5.3 Mapping the spatial distribution of hot spot places of the Earth.

Method of delivery

In addition to the class work, field works/observations is believed to be essential to deliver the course in a complete manner.

### ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

Assessment methods and their value	
Quiz	7%
Test	8%
Assignment	10%
Mid Exam	25%
Final exam	50%

Grading: is as per the university regulation

## **Course policy**

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assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

## References

David Huddart and Tim Stott. Earth Environments: Past, Present and Future, *Liverpool John Moores University*, *UK*, 2010.

Huggett, R. J. Fundamentals of geomorphology/Richard John Huggett. *Routledge fundamentals of physical geography series*, 2003.

Huddart, David, and Tim A. Stott. Earth environments. John Wiley & Sons, 2020.

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## **BAHIR DAR UNIVERSITY**

## INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

Program	Disaster Risk Management and Sustainable Development					
Degree	BSc. In Disaster	BSc. In Disaster Risk Management and Sustainable Development				
Module Name	Supportive Cours	es				
Module Code	02					
Module Coordinator						
Course Title	Economics					
Course Code	Econ2021					
Lecturer						
	Lectures	Tutorials &	Laboratory &	Home	Total	
		seminars	workshop	Study		
	48	0	0	33	81	
Course Objectives &	<ul> <li>The prim</li> </ul>	ary objective of thi	s course is to introd	uce students to	o a number of economics concepts; both	
Competences to be	microeco	nomic and macroed	conomic concepts, a	and to indicate	how these principles are used to analyze and	
Acquired	solve pro	blems in various ar	eas of the economic	e sector. Upon	completion of this course, students will be	
	able to:					
	<ul> <li>Describe</li> </ul>	what an economics	s means;			
	<ul> <li>Meaning</li> </ul>	and uses of microe	conomics and macr	oeconomics, a	and their differences;	
	<ul> <li>Basic eco</li> </ul>	onomic concepts inc	cluding opportunity	costs, scarcity	y, absolute advantage, comparative advantage	
	and Production Possibility Frontier (PPF);					
	<ul> <li>Describe</li> </ul>	and understand the	major theories of c	onsumer beha	wior;	
	<ul> <li>Describe</li> </ul>	and understand the	law of demand and	l the law of su	pply;	

		<ul> <li>How elasticity is calculated and its rele</li> </ul>		ness of goods and services		
		demand and supply for any change in the market;				
		<ul> <li>Describe and understand the major the</li> </ul>	-			
		<ul> <li>Know various decision rules that guide</li> </ul>	-			
		<ul> <li>Develop an understanding for basic ma</li> </ul>				
		<ul> <li><u>Describe the way in which National</u></li> </ul>	Income Accounting measures the	nrough different approaches;		
		<ul> <li>Understand the share of the different</li> </ul>	t economic sectors to Ethiopia'	<u>s GDP;</u>		
		<ul> <li>Describe what unemployment and in</li> </ul>	nflation means; and			
		<ul> <li>Describe and understand the policie</li> </ul>	s that used by the government to	stabilize macroeconomic		
		problems.				
Course		Definition and scope of economics; branches of	f economics and their differences; b	basic concepts of economics		
Descript	ion/Course	(scarcity, productive resources, choice, opportu	unity cost, absolute and comparative	e advantage); production		
Contents	3	possibility frontier; alternative economic system	ns; theory of demand, supply and m	narket equilibrium and their		
		application; theory of production and cost; market structures; measurement of national income accounting (GDP)				
		and; the different tools of macroeconomic policies.				
Pre-requ	isites	None				
Semester	r					
Status of	f Course	Compulsory				
Teaching	g & Learning	The course will be delivered through lectures, class discussions, brainstorming, reading assignment, group				
Methods	5	discussion, exercises and students taking this course will be assessed through quizzes, individual and/or group				
		assignments, mid-term and final examinations.				
Week	Lecture	Contents	Activities	Readings		
	(Hrs)					
$1^{st}$ - $3^{th}$	9	1. Introduction: Basic Concepts in Economics	Lecture and taking lecture note	Dwivedi pp 3-23		
		Definition and Scope of Economics	Individual assignment	Sundharam pp 1-43		
		Branches of economics		Jhingan pp 1-65		
		Basic Economic Concepts: Scarcity, Productive				
		Resources (Labor, Capital, Entrepreneurship,				
		and Land) and outputs (goods and services),				
		Types of goods, Fundamental Economic				
		Problems, Choice, Opportunity Cost, Absolute				

4 <sup>th</sup> -6 <sup>th</sup>	9	<ul> <li>and Comparative Advantage</li> <li>Production Possibility Frontier and economic growth</li> <li>Alternative Economic Systems</li> <li>2. Demand, Supply and Utility Theories</li> <li>Definition, law and determinants of demand for</li> </ul>	Lecture and taking lecture note Individual assignment	Dwivedi pp 42-70 Henderson pp 98-109
		<ul> <li>goods and services</li> <li>Definition, law and determinants of supply of goods and services</li> <li>Market Equilibrium</li> <li>Government and Price Determination</li> <li>Elasticities of Demand and Supply and their determinants</li> <li>Theory of utility and consumer behavior</li> <li>Approaches of utility (Cardinal and Ordinal approaches)</li> <li>Concepts of Indifference curve, budget line and Consumers equilibrium determination</li> </ul>	Quiz	Jhingan pp 87-120 Samuelson pp 77-95 Stanlake pp 113-161 Sundharam pp 59-339 Salvatore and Diulio, pp 13-24
7 <sup>th</sup> -9 <sup>th</sup>	9	<ul> <li>3. Theory of production and cost</li> <li>Definitions of Production</li> <li>Short run and long run Production function</li> <li>Concepts of total product and iso-quants</li> <li>Returns to scale</li> <li>Costs of production and different types of costs</li> <li>Short run and long run costs</li> <li>Relationship between cost and production</li> <li>Profit maximization: Optimal decision rules</li> </ul>	Lecture and taking lecture note Group assignment	Salvatore and Diulio, pp 104- 110, Dwivedi, 1999 pp 138-187
10 <sup>th</sup> - 11 <sup>th</sup>	6	4. Types of Market Structures, characteristics, equilibrium conditions and profit maximization Perfect competitive market structure Monopoly market structure	Lecture and taking lecture note	Salvatore and Diulio, pp 111- 126

		Monopolistic competition market structure Oligopoly market structure		
12 <sup>th</sup> - 14 <sup>th</sup>	9	5. National Income Accounting Circular flow model Approaches for measuring economic performance (GDP) Real and nominal GDP and GNP The contribution of different sectors to Ethiopia's GDP	Lecture and taking lecture note	Harvey pp 343-53 Sundharam pp 460-479 Harvey 351-353 Salvatore and Diulio, pp 74-80
15 <sup>th</sup> - 16 <sup>th</sup>	6	6. Macroeconomic Problems and The Tools of Macroeconomic Problems and Policies Problems: Unemployment, inflation and business cycle tools; Fiscal policy, Monetary policy and Income policy	Lecture and taking lecture note Group discussion & reflection	Salvatore and Diulio, pp 25- 36, 74-80

**Methodology:** This course is an introductory course for non-economists; therefore, we will introduce concepts of microeconomics and macroeconomics as applied to the agriculture sector. In addition to class room lecture you can find many reference texts related with this course so lecture and reading reference materials are the way of addressing the course objective. In addition students should work assignments as per the schedule.

#### ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

Assessment methods and their value	
Quiz	7%
Test	8%
Assignment	10%
Mid Exam	25%
Final exam	50%

Grading: is as per the university regulation

#### **Course policy**

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**Note on class attendance and participation:** All students registered for this course are expected to attend class regularly. I will take attendance on random days during the semester to ensure that students are coming to class, and if you miss class repeatedly, your grade will be affected. If you miss more than 85% of the class attendance you will not sit for exams. Please try to be on time for class. I will not allow you enter if you late more than five minutes. I will often ask questions during my lectures and active participation in class is essential.

**Cell phone:** Cell phones must be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class.

You are responsible for all class announcements and changes. All issues discussed for all class or derived from other sources (where I proved you to read) may be the subject of assignment or final exam question items. Please follow the instruction indicated at each content of your course guidebook to complete all the assignments provided whether they are to be performed individually or in group.

### References

Olayide, S.O and Heady E.O (1982). Introduction to Agricultural Production Economics. University Press, Ibadan. University of Ibadan.

Cramer, G., Jensen C. W. and Southgate, D. D. 2000. Agricultural Economics and Agribusiness. 8<sup>th</sup> Edition. Wiley Publisher.

Gail L. Cramer, Glarence W. Jensen., and Douglas D. Southgate, agricultural Economics and Agribusiness, 7<sup>th</sup> Edition.

Cambell R. McConnel (1980). Economics: Principles, Problems and Policies, McGraw-Hill, New York. David N. Hyman (1989). Economics, Trwin, Boston.

D. N. Dwivedi (1999). Managerial Economics. 5<sup>th</sup> edition. Vikas Publishing House Pvt Ltd, New Delhi. D. N. Dwivedi (2002). Managerial Economics. 6<sup>th</sup> edition. Vikas Publishing House Pvt Ltd, New Delhi.

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Paul A. Samuelson and William D. Nordhaus (1989), Economics, McGraw-Hill.

Penson, J., O. Capps Jr., P. Rosson and R. Woodward (2009). *Introduction to Agricultural Economics*, 5<sup>th</sup> edition. Thomson/Prentice-Hall.

Salvatore, D. and Diulio, E. (2003). Principles of Economics, McGraw-Hill, New York.

Stanlake, G F and S J Grant (1995). Introductory Economics. 6<sup>th</sup> edition.

Sundharam, KPM (2002). Elementary Economics. Economic Theory. 8<sup>th</sup> edition.

Taylor (2004). Economics. 4<sup>th</sup> edition

#### Approved by:

Name Course Instructor

Signature

Name Course Chair



#### BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

	INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES				
Program	Disaster Risk Management & Sustainable Development				
Courses Code	Drms 2033				
Courses Title	Anthropogenic Hazard				
Degree program	BSc. In Disaster Risk Management and Sustainable Development				
Module Name	Disaster risk management I (DRMI)				
Module Number	M03				
Course Chair					
Instructor/Tutor Name					
ECTS Credit (CP)	5				
Target group	2 <sup>nd</sup> Year DRMSD Students.				
Year /semester	Year II Semester II				
Pre-requisites	None				
Status of the course	Major				

#### **Course Description**

This course is a systematic review of anthropogenic hazards related to human activities which may cause loss of life or injury, damage to property, and/or social or economic disruption. The course is organized into three broad categories of hazards related to human activities. These are socio –political hazards, technological hazards and environmental hazards. Socio- political hazards include crime, conflict/war, civil disorder, and terrorism whereas technological hazards focus on technological failures, industrial and chemical accidents and nuclear hazards. Environmental hazards, on the other hand, include land degradation and environmental pollution. The course also explores the pre, during and post disaster risk management approaches and assessments for different anthropogenic hazards.

#### **Course Objectives:**

At the end of this course, student will be able to:

- Define anthropogenic hazard
- Identify the types of anthropogenic hazards
- Discuss the nature of different types of anthropogenic hazards
- Explain the nature and characteristics of socio-economic, and political hazards

- Discuss the main features and adverse effects of technological hazards
- Discuss the vulnerable, risk conditions and assessment of Anthropogenic hazards
- Discuss the pre and post disaster risk management approaches for different types of anthropogenic hazards,
- Appreciate the role of understanding the complex nature of anthropogenic hazards to disaster risk management.

Wee k	Lecture (hr)	Conceptual focus	Assignment / Task /	Readings
K	3	Unit 1:Overview of anthropogenic hazards Introduction Definition and concepts Types of anthropogenic hazards	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	State and local mitigation planning: integrating man made hazards into mitigation planning. FEMA 2003
2-4	9	Unit2. Socio-economic hazards 2.1. Crime 2.2.Conflict/war 2.3.Civil Disorder	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	
5-8	12	Unit 3. Technological Hazards 3.1 Definitions, Basic concepts 3.2 Terrorism 3.3 Industrial accidents 3.4 Transport accidents 3.5 Infrastructures failure 3.6 Fire risk	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Keith and petley (2009). Environmental hazards
9-12	12	Unit 4. Environmental Degradation 4.1.Definitions, Basic concepts 4.2.Land degradation 4.3.Deforestation 4.4. Desertification 4.5. Soil erosion 4.6 solid and liquid Waste	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Amede,T., et. al (2001):Reversing the Degradation of Arable Land in the Ethiopian High lands
12- 16	12	Unit 5.Environmental pollution 5.1. Definitions, Basic concepts 5.2.Water pollution 5.3.Air pollution 5.4.Soil pollution 5.5. Noise pollution	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions, laboratory	Soonneveld,B.G.J .S.(2002).Land Under Pressure: The Impact of Water Erosion on Food Production in Ethiopia

### SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READINGS

### LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

#### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, assignments; project works, quizzes and final exam.

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Activities	Marks				
Quiz 1	7%				
Test 1	8%				
Group/individual Assignment and presentation	10%				
Mid Exam	25%				
Final Exam	50%				
Total	100%				

SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

#### **COURSE POLICY**

All students are expected to abide by the code of conduct of articles (Article 194 of The Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I will give out the directions, if I find necessary, for the assignments one week prior to their due date.

#### .REFERENCES

- Amede, Takle Belachew and Endrias Geta., *et .al* (2001):Reversing the Degradation of Arable Land in the Ethiopian High lands. Managing Africa soils.No.23.2<sup>nd</sup> ed.
- Benin, S., Pender J. Ehuo, S. (2002). Policies for Sustainable Land Management in the East African Highlands. IFPRI & ILRI. Summary of Papers and Proceedings Conference. Addis Abeba. April 24-26, 2002.
- Daba, S. (2003). An investigation of the Physical and Socioeconomic Determinants of Soil Erosion in the Hararghe Highlands East Ethiopia. Land Degradation and Development 14. 69-81.

- 4. Sonneveld, B.G.S. (2002). Land Under Pressure: The Impact of Water Erosion on Food Production in Ethiopia. Shaker publishing. Netherlands.
- 5. State and Local Mitigation Planning: Integrating Man Made Hazards into Mitigation Planning. FEMA 2003

## Approved by:

Name Course Instructor /Tutor

Name Course chair

Signature

Name Department Head Signature							
BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES							
Program	Disaster F	Risk Manager	nent	and Sustainabl	e Dev	elopment	
Courses code	<b>Drms 207</b>	1					
Courses Title	Introductio	on to Statistics	S				
Degree Program	BSc. in Di	isaster Risk N	/Iana	gement and Sus	staina	ble Develo	opment
Module name	Research	methods and	Tool	S			
Module number	07						
Course chair							
Instructor/Tutor							
ECTS credit (CP)	5						
Contact hours per week	Lectures	Tutorials seminars	&	Laboratory workshop	&	Home Study	Total
	<b>48</b>	-		-		87	135
Lecture days, hours & room							
Tutorial /lab days & hour							
Target group							
Year /semester	2 <sup>nd</sup> year 1 <sup>st</sup> semester						
Pre-requisites	None						
Status of the course	Major						

## **Course Description:**

Students of Disaster Risk Management and Sustainable Development must learn and understand theories and methodology of statistics, which provide them means of data collection, processing, analysis and interpretation of both numerical and qualitative data/information in logical and meaningful terms. The course aims to equip students with the necessary theoretical knowledge of statistics that enables them to understand its application in the field of DRMSD. Topics include basic concepts in statistics; the importance of statistics in conducting researches; methods of data collection and representation; frequency distribution and graphs/diagrams; measures of central tendency, measures of dispersion/variability; elementary probability theory and rules; probability distributions; sampling techniques and sampling distribution; statistical Estimation and hypothesis testing; simple linear regression & correlation.

### **Course Objectives:**

After completing this course, students will be able to:

- Demonstrate an understanding of basic statistical concepts;
- Differentiate the various types of sampling Techniques;
- Identify the different types of statistical distributions with their applications;
- Demonstrate how to apply the different methods of data collection, organization, and presentation;
- Describe the given data set with appropriate measures of central tendency and variability;
- Explain various probability distributions applied in DRMSD;
- Undertake statistical inferences about population parameters based on point and interval estimates using the appropriate test statistics;
- Determine the significance of the conclusions made about population parameters by performing hypothesis testing;
- Make predictions and forecasting using simple linear regression analysis and also make relationships between variables with correlation;

Schedu	le of lectur	e topics, Activities and readings		
Week	Lecture (hrs)	Conceptual focus	Activities/tasks	Reading
		Chapter One: Introduction – Basic Concepts of Statistics		Handout compiled by the teacher
1		What is statistics	Active	
1		Type of statistics	participation during lecturing,	
2		Variables	group	
3		Scales of measurement	discussion, take notes from lecture and assignment presentation	
3		Functions of statistics	Active	Adams, J. 1994. At
4		Limitations of statistics	participation	Risk. UCL Press,
5		Chapter Two: Methods of data collection and presentation	during lecturing, group	London
6		2.1 Methods of data collection	discussion, take notes from lecture and assignment presentation	
6		Primary and secondary data	Active	Blaikie, P. 1994.
7		Types of data	participation	At Risk. Natural
7		2.2 Data presentation	during lecturing, group discussion, take notes from lecture and assignment presentation	Hazards, People's Vulnerability, and Disasters. Rutledge, London.
8		2.2.1 Frequency distributions: Qualitative, quantitative (absolute, relative, percentage, cumulative)		
8		2.2.2 Diagrammatic presentation of data: Bar charts, pie-chart, 2.2.3 Graphical presentation of data: Histogram, Frequency polygon, Ogive	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	Handout prepared by the teacher
9		Chapter three: Numerical Descriptive Techniques	Active participation	Handout prepared by the teacher
9		3.1 Measures of Central Tendency (mean, median , mode, quantiles	during lecturing, group	

	(quartiles, decile and percentile))	discussion, take	
10	3.2 Measures of Variation (Range, Standard Deviation, Variance, Coefficient of Variation, Standard score)	notes from lecture and assignment presentation	
10	3.3 Measures of shape (moment, skewness and kurtosis),		
11	Chapter Four: Theory of probability and probability distributions	Active participation during lecturing,	Handout prepared by the teacher
11	4.1 Theories of probability	group	
12	Principles of counting(permutations and combinations)	discussion, take notes from lecture and	
13	Approaches in probability definition, Conditional probability and independence, Basic Rules of Probability	assignment presentation	
14	4.2 Random variables and Probability Distributions		
14	Random variables, Binomial and poisson distribution,		
14	Normal, t and Chi-Square- distributions and applications		
15	Chapter Five: Sampling Methods	Active	Handout prepared
15	5.1 Introduction to Sampling Theory 5.2 Probability and non-probability Sampling Methods	participation during lecturing, group discussion, take notes from	by the teacher
15	<ul> <li>Chapter six: statistical inference</li> <li>6.1 Statistical estimation of the Mean and Proportion</li> <li>6.2 Determining the Sample Size</li> </ul>	notes from lecture and assignment presentation	
15	<ul> <li>6.3 Basic concepts in Hypothesis Testing</li> <li>6.4 Hypothesis Tests about a single Population Mean and proportion</li> </ul>		
15	6.5 Chi-Square Tests of Association of Attributes		
16	Chapter seven: Simple Linear Regression and Correlation (Cr hr 6)	Active participation during lecturing,	Handout prepared by the teacher
16	7.1 Simple Linear Regression of Y on X	group discussion, take	
16	7.2 Simple Linear Correlation	notes from	
16	7.3 Spearman's Rank Correlation	lecture and assignment presentation	

## LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works

- Lecture
- Reflections: Keep a weekly written reflection of students' reactions, questions about the readings and discussions in class.
- Home work: Assignments will be given to help reinforce some topics covered or not covered in class

### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, individual and group assignments, quizzes and final exam.

### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Test 1	8%
Mid exam	25%
Quiz	7%
Group assignment	10%
Final Exam	50%
Total	100%

Note: Grading System: As per University's regulation

## **Course Policy**

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## **Reference:**

Gupta, C.B. (1987) .An introduction to statistical Methods, Vikas Publishing House.

Gupta, S.P. (1997). An Introduction to statistical Methods, University of Delhi

Salvatore, D. and Reagle, D. (2005). Statistics and Econometrics.

Rutledge, London.

Approved by:

Name Course Instructor /Tutor

Name Course chair

Signature



BAHIR DAR UNIVERSITY							
INSTITUTE OF DISASTER	RISK MANAGEN	IENT AND FOO	DD SECURITY STU	JDIES			
Program	Disaster R	isk Management	and Sustainable De	evelopment			
Courses code	Inct 2025						
Courses Title	Computer	and its applicati	ons				
Degree Program	BSc. in Dis	saster Risk Mana	agement and Sustair	nable Develo	opment		
Module name	Supportive	e Courses					
Module number	02						
Course chair							
Instructor/Tutor							
ECTS credit (CP)	5						
Contact hours per week	Lectures	Tutorials &	Laboratory &	Home	Total		

		seminars	workshop	Study	
	32	-	48	55	135
Lecture days, hours & room					
Tutorial /lab days & hour					
Target group					
Year /semester					
Pre-requisites					
Status of the course	Suppor	tive			

### **COURSE DESCRIPTION**

This course is designed to introduce computer basics to students of different backgrounds who will have different responsibilities. A major aim of the course is to provide students with the basic skills to use application software explore the internet and develop their capacity in using the computer technology for facilitating their learning process and corresponding area of engagement.

The very intent of the course is to make students understand what computer system is and its components are, what information is, how information is processed and represented in a computer system and the use of some basic application packages. It is also designed to help students appreciate the use of Information Technology in different organizations and relate the use of this technology to their respective disciplines. The course will finally help students to develop the skills in creating and managing files in a computer system, using application packages and surfing the internet.

#### **OBJECTIVES OF THE COURSE**

- At the end of the course, the student will be able to:
- list and describe the components of a computer system,
- explain the reasons why we use computers and describe the potential and capabilities of computers,
- list out main areas of computer applications,
- explain the history of computer,
- identify differences between the five generations of computer,
- explain characteristics of computers,
- describe different types of computers,
- describe data representation in computer systems,
- identify different types of operating systems,
- create folders to manages files stored in a computer,
- identify main application packages and develop the skills in using them,
- develop the skill to surf the internet

# TENTATIVE SCHEDULE OF LECTURE TOPICS AND READINGS

## **Course Contents**

Part I (Theoretical part)

PARTI	UNIT	DATE	CONCEPTUAL FOCUS	<b>References/Assignments</b>
	Chapter 1	Week	Definition of computers,	Obsbarne, Adam, basic
	Introduction to	1	Applications areas of	concepts on computer
	computer		computers, use of	
			computers, Measures of	
			computer quality and	
			performance.	
		Week	Generations and history of	Assignment on limitations
		2	computers, Limitations of	of computer (5%)
			computers.	
		Week	Characteristics of computers	Reading assignment from
		3	Classifications of computers	L.Alexis, Introduction to
			based on different criteria.	computers book
			Advantage and disadvantage	
			of computers.	
	Chapter 2 Basic	Week	Computer hardware	Reading assignment from
	Computer system	4 and	Input	L.Alexis, Introduction to
		Week	processer	computers book
		5	Out put	
			Storage	
			Memory	
			Computer software	
			Application Software	
			System Software	
	Chapter 3 Data,	Week	Data versus information	Reading assignment from
	Information, Basics	6	Sources of information	L.Alexis, Introduction to
	of data processing			computers and Obsbarne,
	and Data			Adam, basic concepts on
	Representation			computer
		Week	Basics of data processing	Reading assignment from
		7	Data representation	Handout,
				Bartu, Digital computer,
				Thomas, digital computer
<b>•</b>				fundamentals
cal		Week	Computer number system	Assignment on number
Part one (Theoretical)		8	converting one system to	system conversion (5%)
heo		XX 7 -	another	
E	Chapter 4 Operating	Week	Definition of operating	
one	System.	9 and	system	
irt (		10	Types of operating System	
Pa			Function of Operating	

			system	
Chapte	er 5	Week	Definition of computer	Reading assignment from
-	uction to	11	networks	Spohn DarkenL,
	rking and	and	Modes of data	computer networks,
Intern	0	12	communication	Blissmer Roberth,
			Types of computer networks	computer
			Advantage and disadvantage	
			of computer network.	
		Week	Network topology	Reading assignment from
		13 and	Network devices and	Handout given
		14	transmission media	
			What is the Internet?	
Chapte	er 6 Computer	Week	Definition of computer virus	Handouts will be given
virus		15	Types of computer virus	
			Symptoms that an infected	
			computer shows	
			Prevention mechanism of	
			computer virus	

## Part II (Practical part)

PART	UNITS	DATE	CONCEPTUAL FOCUS	References/Assignments
II	UNIIS			
		Week 1	Desktop components(icons,	Reading assignment from internet
			files and folders, drives, task	sources, Microsoft Windows
			bar, start menu)	Tutorial - Lesson 1-5 Introduction
			windows components (title bar,	to Computers.html
			menu bar, address bar,	
			minimize button,	
	Ms-		restore/maximize button, close	
	windows		button )	
	windows		Creating, Opening, Moving	Reading assignment from internet
		Week 1	,Copying ,Renaming files and	sources, Microsoft Windows
			folders	Tutorial - Lesson 1-5 Introduction
			Deleting files and folders	to Computers.html
			temporary	
			Deleting and restoring files and	
ical			from recycle bin	
Part two (Practical)			Elements of ms-word screen	Reading assignment from internet
(Pr		Week 2	Creating a document using ms-	sources, Microsoft word Tutorial
0M			word	- Lesson 1-6 Introduction to
rt t			Saving the created files	Computers.html
Paı			Opening recently and other	

		existing files	
Ms-word	Week 3	Navigating and scrolling through a document Selection techniques Editing a text(spelling checking, finding synonyms and thesauruses) Coping, moving and deleting a text	Reading assignment from internet sources , Microsoft word Tutorial - Lesson 1-6 Introduction to Computers.html
	Week 4	Font Formatting (Size, color, font type, font style, underline, bold, italics) Paragraph Formatting(Bulleting and numbering, drop cap, alignment of text (center, left, right)	Reading assignment from internet sources, Microsoft word Tutorial - Lesson 1-6 Introduction to Computers.html
	Week 4	Creating column on ant part of a document Inserting Tables, Pictures and Auto shapes	Reading assignment from internet sources, Microsoft word Tutorial - Lesson 1-6 Introduction to Computers.html
	Week 5	Printing a document Using help for further advanced application of Ms-Word	Reading assignment from internet sources, Microsoft word Tutorial - Lesson 1-6 Introduction to Computers.html
	Week 6	Elements of ms-Excel screen Creating workbook Saving the created workbook Opening recently and other existing workbook	Reading assignment from internet sources , Microsoft Excel Tutorial - Lesson 1-6 Introduction to Computers.html
Ms-excel	Week 7	Entering and Editing text Selection techniques Cell and text Formatting (Size, color, font type, font style, underline, bold, italics) Adding Bulleting and numbering, alignment of text (center, left, right)	Reading assignment from internet sources , Microsoft Excel Tutorial - Lesson 1-6 Introduction to Computers.html
	Week 8	Creating border and shading Creating table Cell referencing Creating simple formula	Reading assignment from internet sources, Microsoft Excel Tutorial - Lesson 1-6 Introduction to Computers.html
	Week 9	Using built-in functions Copy, cut and using fill handle to copy a formula and deleting	Reading assignment from internet sources, Microsoft Excel Tutorial - Lesson 1-6 Introduction

		a text	to Computers.html
	Week 10	Creating and formatting Chart	_
	Ũ		Reading assignment from internet
		Using help for further advanced	sources, Microsoft Excel
		application of Ms-Excel	Tutorial - Lesson 1-6 Introduction
			to Computers.html
	Week	Further practical exercise about	Microsoft Excel Tutorial - Lesson
	11	word and excel.	1-6 Introduction to
			Computers.html
	Week 12	Opening ms- PowerPoint	Reading assignment from internet
		Creating presentations	sources, Introduction-to-
		Choosing layouts	computers-ppt.html
Ms-o	wer Week 13	Changing the color scheme	Reading assignment from internet
point		Applying different design	sources, Introduction-to-
		templates	computers-ppt.html
		Creating effects such as	
		animation and slide transitions	
		What is internet browser?	Reading assignment from internet
	Week 14	Opening Internet explorer	sources, Basic Computer
Baici	ideas	Exploring the internet through	netwoking.html
bout		internet explorer	
inter	net Week 15	Creating e-mail account	Reading assignment from internet
		Sending message	sources, Basic Computer
		Checking inbox	netwoking.html

## Methodology

By using lectures, demonstrations and class discussion methods the six chapters will be covered. Analytical questions on the uses of information technology and data representation in a computer, project works in creating folder structure, word document and work book will also be used as a method of assessment.

## ASSESSMENT METHODS

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, individual and group assignments, quizzes and final exam.

Activities	Marks
Test 1	8%
Mid exam	25%
Quiz	7%
Project work	10%
Final Exam	50%
Total	100%

## SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading System: As per University's regulation

## **Course Policy**

All students are expected to abide by the code of conduct of students (article 194, 195, 196, 197, 198 and 199, of the Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Since the course does have a number of practical exercises in the laboratory, students are urged to attend every practical session. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

#### **<u>REQUIRED REFERENCE BOOKS</u>** (this books must be placed on reserve desk at the library)

Bartu, Digital computer Thomas, digital computer fundamentals Spohn DarkenL, computer networks S.Williams, using information Technology. A practical introduction to computers\_and communications. Third Edition Foundation of computing

#### BIBLIOGRAPHY

S.Williams, using information Technology. A practical introduction to computers\_and communications. Third Edition L.Alexis, Introduction to computers Sarah F. Hutchinson, computers the user perspective Obsbarne, adam, basic concepts on computer Spohn DarkenL, computer networks Bartu, Digital computer Thomas, digital computer fundamentals Peter –Norton introduction-to-computer-system 6th-edition-eboo

Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Department head

Signature

Signature

BAHIR DAR UNIVERSITY COLLEGE OF AGRICULTURE AND ENVIRONMENTAL SCIENCES				
Program	Disaster Risk Management and Sustainable Development			
Courses code	Drms2034			
Courses Title	Perception and Identification of Risk			
Degree Program	BSc. in Disaster Risk Management and Sustainable Development			

Module name	Disaster Risk Management I				
Module number	M03				
Course chair					
Instructor/Tutor					
ECTS credit (CP)	4				
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total
	48	-	-	60	108
Lecture days, hours & room	-				
Tutorial /lab days & hour					
Target group	2 <sup>nd</sup> Year Disaster Risk Management and Sustainable Development Students				
Year /semester	2 <sup>nd</sup> Year 2 <sup>nd</sup> Semester				
Pre-requisites	None				
Status of the course	Major				

**Course Description:** 

All those who make risk related decisions require sound knowledge on which to base their decisions, wherever possible including the best scientific knowledge available. Often they are confronted by the need to make decisions in which they must allocate resources to one or more of several different problems, and are required to do so in the absence of any objective means of comparing the risks or the impact of their decisions. This course offers a possible way of providing a scientific basis for disaster risk management related decisions. The course can contribute to a better understanding of how risk is constructed, perceived and managed by experts and the general public.

The course focuses on concept of risk, the human perception of risk, local community's knowledge and awareness of disaster reduction activities, aspect of disaster management, local capacity building and risk reduction, the difference between actual and perceived risk.

## **Course Objectives:**

At the end of the course, the student will be able to:

- Explain the concept of risk;
- Identify the types of risk based on different criteria,
- Identify the interaction among hazards, vulnerability, risk and capacity;
- Describe the assessment of risk and vulnerability;
- Describe qualitative and quantitative risks;
- Gain knowledge of the risk society;
- Explain risk perception and communication;
- Describe risk based decision making.
- Conduct risk assessment
- Appreciate risk perceptions and communication for Disaster Risk management
- Identify the risk assessment tools and procedures

# SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READINGS

Week	Lecture(hrs)	Contents	Activities/tasks	Readings
W1-4	12	Chapter 1. Introduction to risk	Active participation during	
		1.1.concepts and definition of risk	lecturing, group discussion, take	Handout compiled by the
		1.2.Types of risk	notes from lecture and assignment	teacher)
		1.3. Classification of risk based on structures	presentation	
		• Sector		Module perception and
		Technology		identification of risk prepared
		Operational		by Gambella university;
		• Financial		Ethiopia
		Competitors		
		• Customers		Slovic, P., (1996) the
	1.4.measuring/quantifying risk			perception of Risk, Earthscan,
		1.5. Interaction of hazard, vulnerability, risk		publications, Ltd.
		and capacity		UNDP(2004) Reducing
		1 5		disaster risk : a Challenge for
				Development
W5-8	12	Chapter 2. Disaster Risk Perception	Active participation during	Handout compiled by the
		2.1 Risk perception :Key concepts	lecturing, group discussion, take	teacher
		2.2.Qualitative/quantitative risk	notes from lecture and assignment	
		2.3. Risk perception and decision making	presentation	Module perception and
		2.4.Theory of risk perception		identification of risk prepared
		Psychology approach		by Gambella university;
		Cultural theory		Ethiopia
		Social amplification		
		2.5.risk perception and attitude assessment		
		2.6. Obstacles/ challenges in perception of		
		risk assessment		
		2.7.Outrage factors		
W9-12	12	Chapter3: Risk communication	Active participation during	Module perception and
		3.1.concepts of risk communication	lecturing, group discussion, take	identification of risk prepared
		• Sender, Media, Message, Receiver	notes from lecture and assignment	by Gambella university;
		3.2. Why is risk communication	presentation	Ethiopia
		3.3. steps in risk communication	Discuss on selected Case Studies	
		3.4.Communication during disaster		

		3.5Humanitarian communication		
		3.6 .Post disaster communication		
		3.7.The seven cardinal rules for risk		
		communication		
W12-	12	Chapter 4 : Disaster Risk Identification	Active participation during	Module perception and
16		and assessment	lecturing, group discussion, take	identification of risk prepared
		4.1.Risk identification	notes from lecture and assignment	by Gambella
		Risk identification activities	presentation	university;Ethiopia
		• Sources for identifying risks	Discuss on selected Case Studies	
		<ul> <li>Procedures for identifying risk</li> </ul>		Coburn, et al. (1994)
		4.2.Concepts of risk assessment		vulnerability and risk
		• Steps of risk assessment		assessment, UNDP/UNDRO
		Importance of risk assessment		
		• Tools for risk assessment		
		4.2.1.Hazard assessment		
		Concepts of hazard assessment		
		Steps in hazard assessment		
		<ul> <li>Tools used for hazard assessment</li> </ul>		
		4.2.2.Assessing vulnerability/capacity		
		• Types and dimensions of		
		vulnerabilities of		
		Types of capacities		
		Vulnerability assessment steps		
		• Tools of vulnerability assessment		
		4.3.Multi risk –vs - single risk assessments		

## LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works

- Lecture
- Reflections: Keep a weekly written reflection of students' reactions, questions about the readings and discussions in class.
- Home work: Assignments will be given to help reinforce some topics covered or not covered in class

### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, individual and group assignments, quizzes and final exam.

## SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Test 1	8%
Quiz	7%
Individual /group Assignment	10%
Mid exam	25%
Final Exam	50%
Total	100%

Note: Grading System: As per University's regulation

## **Course Policy**

All students are expected to abide by the code of conduct of students (Article 194 of The Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and

raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

#### **Reference:**

Beck, U., (1992) Risk society, Towards a New modernity, .London

Bethke et al. (1977 Building Capacities for Risk Reduction, UNDP/UNDR

Coburn, et al. (1994) vulnerability and risk assessment, UNDP/UNDRO

Slovic, P., (1996) the perception of Risk, Earthscan, publications, Ltd.

UNDP (2004) Reducing disaster risk : a Challenge for Development

UNISDR (2002) Living with Risk – a global review of Disaster Risk Reduction Initiative

Wisner, B et al (2003) At Risk: Natural Hazards, People's Vulnerability and Disasters. Routledge, London.

#### Approved by:

Name Course Instructor /Tutor

Name Course chair

Signature

Signature

Name Department Head



# **BAHIR DAR UNIVERSITY**

# INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

Program	Disaster H	Disaster Risk Management and Sustainable Development			
Courses code	Drms 203	6			
Courses Title	Early Wa	rning Systems and	d Disaster Risk Infor	mation	
Degree Program	BSc. in Di	isaster Risk Mana	gement and Sustaina	ble Develo	pment
Module name	Disaster H	Risk Management	Ι		
Module number	03				
Course chair					
Instructor/Tutor					
ECTS credit (CP)	5				
Contact hours	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total
	48	-	-	87	135
ecture days, hours & room	-		1	1	
Tutorial /lab days & hour					
Target group	2 <sup>nd</sup> Year Disaster Risk Management and Sustainable Development Students				
Year /semester	2 <sup>nd</sup> year 2 <sup>nd</sup> semester				
Pre-requisites	None				
Status of the course	Major				

# **Course Description:**

Billions of dollars are properly spent each year for necessary mitigation responses by police, fire, military, and emergency personnel to save lives and property from the damaging effects of both natural and manmade disasters. The vast majority of these efforts are all directed to reducing the impact on people and property *after* a disaster has occurred. Although natural phenomena by definition cannot be prevented, their human, socioeconomic, and environmental impacts can and should be minimized through appropriate measures, including risk, and vulnerability reduction, preparedness and early warning.

However, very little effort is made to mitigate disasters *before* their impact. We know from experience that while some material losses seem to be unavoidable, especially in the case of very large and infrequent events, such as floods and earthquakes, in some cases the loss of human lives could have been avoided if safety measures and efficient early warning systems had been in place.

Early warning is a multidisciplinary and multi-sectoral area of study that requires applying the knowledge to disaster management. The system is based on providing timely and appropriate information geared towards preventive steps to be taken by communities, government and other agencies to reduce disaster risks.

Early warning touches the lives of individuals, groups, communities and society at large in a number of ways. At an individual level, for example, if you go to your doctor for a regular health checkup, the doctor may identify signs of illness early and prescribe appropriate treatment.

# **Course Objectives:**

At the end of the course students should be able to:

At the end of this course, students will be able to:

- Define early warning and understand concepts of EWS;
- Define the concept and components of disaster risk information, identify sources of disaster risk information, and explain ways in which it can be gathered and monitored;
- Analyze the link between hazards, vulnerabilities, disaster risks and EWS in Ethiopia,
- Describe the features, aim and objectives of EWS in Ethiopia;
- Analyze the structure, roles and responsibilities of Ethiopian early warning system actors
- To identify the early warning system approaches and tools

Week	Lecture	Conceptual focus	Activities/tasks	Reading
	(hrs)			
		<b>Chapter One: Concepts of Early</b>		Handout compiled by
		warning systems		the teacher,
Week	1	Definition and concepts of early	Active	EPaRDA.(2008), Pastoral
1	1	warning systems	group discussion,	Early Warning System
	1	Components/elements of early warning systems		Field Operation Manual,
	1	Types of hazards and EWS	take notes from	Pastoral Community
Week 2	1	Types of early warning systems	lecture and assignment	Development Project
	1	asic Concepts in Early Warning presentation ystems	presentation	(PCDP), AA, Ethiopia.
	1	Characteristics of Early Warning		
	1	Systems		
	1	Politics and early warning systems		
	1	Tonties and early warning systems		
Week 3	1	Frameworks of early warning systems		
	1	Community based early warning systems		
	1	Cross-cutting issues in EWS		
	1	Chapter Two: Disaster Risk		
		Information		
Week 4	3	Concept of disaster risk information		
-		Data, Information and Knowledge		
		Principles of disaster risk information	Active	
Week	3	Identify sources of disaster risk	participation	
5	5	information	during lecturing,	
-		Instruments of data collection for	group discussion,	
		disaster risk information	take notes from	
		Elements of disaster risk information	lecture and	
		communication	assignment	
			presentation	
		Communication of early warning		
		information		
		Chapter Three: the Ethiopian Early	Active	Blaikie, P. 1994. At
		Warning System	participation	Risk. Natural Hazards,
Week	1	The link between disaster risk	during lecturing,	People's Vulnerability,
6		management and early warning systems	group discussion,	and Disasters.
	1	Disasters in Ethiopia	take notes from	Rutledge, London.
	1	Ethiopian response to disasters		Adams, J. 1994. At Risk.
Week 7	1	Indigenous early warning system	assignment presentation,	UCL Press, London
-		Conventional early warning system	Case study	1

	1	Aims of the Ethiopian EAS		
		Objectives of the Ethiopian EWS	Active participation	Handout prepared by the teacher
Week 8	1	Basic functions of the Ethiopian EWS	during lecturing, group discussion,	
	2	Components of EW processes	take notes from	
Week	3	Features of the Ethiopian EWS	lecture and	
9		L L	assignment	
			presentation	
		Monitoring	Active	Handout prepared by the
		Indicators	participation	teacher
Week	2	Types of indicators	during lecturing,	
10			group discussion,	
	1	Early warning indicators by food	take notes from	
		supply system	lecture and	
Week	1	Crop dependent food supply	assignment	
11			presentation	
	1	Livestock dependent food supply		
	1	Market dependent food supply		
Week	2	Coping mechanisms		
12				
	1	Evaluating Early warning system in Ethiopia		
		Chapter Four: Structures, roles and		Handout compiled by
		responsibilities of partners in the		the teacher,
		Ethiopian EWS		EPaRDA.(2008),Pastoral
Week	1	Structures of EWS	Active	Early Warning System
13	1		participation	Field Operation Manual,
10	1	Partners in early warning system	during lecturing,	Pastoral Community
	1	Roles and responsibilities	group discussion,	Development Project
Week	1	Local community	take notes from	(PCDP), AA, Ethiopia.
14	1		lecture and	
	1	Government	assignment	
	1	Donors	presentation	
	1	NGOs	-	
		Chapter Five: early warning system		Handout compiled by
		approaches and tools		the teacher,
Week	1	Introduction	Active	
15			participation	
	1	Risk and vulnerability mapping	during lecturing,	
	1	Household economy approach	group discussion,	
Week	2	Food balance sheet approach	take notes from	
16		Tr	lecture and	
	1	LEAP, Emergency Nutrition	assignment	
		Coordination unit (ENCU), risk	presentation	
		profiling, other Approaches		

# LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works

- Lecture
- Reflections: Keep a weekly written reflection of students' reactions, questions about the readings and discussions in class.
- Home work: Assignments will be given to help reinforce some topics covered or not covered in class

# **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, individual and group assignments, quizzes and final exam.

# SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Quiz	7%
Test	8%
Individual Assignment	10%
Mid Exam	25%
Final Exam	50%
Total	100%

Note: Grading System: As per University's regulation

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You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

#### References

- Ethiopian Disaster Prevention and Preparedness Commission (2000): National Food Security Monitoring, Addis Ababa
- Ethiopian Early Warning System (2005), Amhara National Regional State Food Security Coordination and disaster prevention Office, March 2005',
- Ethiopian Pastoral Research and Development Association (EPaRDA).2008. Pastoral Early Warning

System Field Operation Manual, Pastoral Community Development Project (PCDP), Addis Ababa, Ethiopia.

- General Guidelines for the implementation of the National Policy on Disaster Prevention and Management (1005), July 1995, Addis Ababa
- Living Disaster Behind (2006), Risk Reduction Models to help communities reduce their vulnerability to disasters.

Regional Consultation Europe Report for EWC II. (by Erich J. Plate), 28-29 July 2003 - Potsdam, Germany.

Training manual for Early warning System in Ethiopia (2000), Early Warning Department, Disaster

Prevention and Preparedness Commission, Addis Ababa, Ethiopia, March, 2000

UNISDR (2003): Early Warning as Matter of Policy, Geneva

UNISDR (2002), Living with Risk, A global review of disaster reduction initiatives, Geneva, July 2002

World Meteorological Organization (2000); Forecasting Natural Disasters, Geneva

Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Program manager

Signature

Signature



BAHIR DAR UNIVERSITY

#### INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

Program	Disaster R	Disaster Risk Management & Sustainable Development					
Courses code	Drms2052						
Courses Title	Livelihood	s and Food Secu	rity				
Degree Program	BSc. Disas	ter Risk Manager	ment & Sustainabl	e Develop	ment		
Module name	Disaster an	nd Development					
Module number	05						
Course chair							
Instructor/Tutor							
ECTS credit (CP)	5						
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total		
	64	-	-	71	135		
Lecture days, hours & room							
Tutorial /lab days & hour							
Target group	2 <sup>nd</sup> Year DRMSD Students.						
Year /semester	Year II Semester II						
Pre-requisites	None	None					
Status of the course	Major						

#### **Course Description**

This course will introduce the wider concept of livelihood and its relation with disaster risk management. It also aimed to introduce different approaches used in the analysis of livelihood including sustainable livelihoods frameworks and household economy approach. In addition, the concepts and elements of food security will be discussed.

#### **Course Objectives:**

After completing your study on this course, you should be able to:

- Understand the meaning of livelihood
- Discuss the components of livelihood
- > Understand sustainable livelihoods framework
- > Analyze the major components of sustainable livelihood framework
- > Describe the origin of Household Economic Approach
- > Understand the concept of Household Economic Approach
- > Understand the diverse concepts of food security and insecurity
- Identify the components of food security

Week	Lectur	Conceptual focus	Assignment /	Readings
1	<b>e (hr)</b> 16	1. The concept and	Task / Listen to a	Course materials
1	10	<ul> <li>1. The concept and</li> <li>components of livelihoods</li> <li>1.2. The concept of livelihoods</li> <li>1.3. Components of livelihoods</li> <li>1.3.1. Capabilities</li> <li>1.3.2. Assets</li> <li>1.3.3. Activities</li> <li>1.3.4. Entitlements</li> <li>1.3.5.</li> </ul>	lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	<ul> <li>Course materials</li> <li>CARE (2002), Household Livelihood Security Assessments.</li> <li>DFID, 1992. Sustainable Livelihoods.</li> </ul>
2	6	<ul> <li>2 Sustainable livelihoods framework (SLF)</li> <li>2.1 Sustainable livelihoods</li> <li>2.2 DFID SLF</li> <li>2.2.1 Vulnerability Context</li> <li>2.2.2 Livelihood Assets</li> <li>2.2.3 Livelihood Strategies</li> <li>2.2.4 Policies, Institutions and Processes</li> <li>2.2.5 Livelihood Outcomes</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	<ul> <li>De Satgé, R (2002). Learning about livelihoods Insights from southern Africa.</li> <li>Course Material</li> </ul>
3	10	<ul> <li>3. Livelihood diversification and its measurement</li> <li>3.1. The concept of livelihood diversification</li> <li>3.2. Types of livelihood diversification <ol> <li>Distress livelihood diversification</li> <li>Progressive livelihood diversification</li> </ol> </li> <li>3.3. Measuring livelihood diversification</li> <li>3.3.1. Human development indexing approach</li> <li>3.3.2. Factor analysis approach</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	<ul> <li>Boudreau,T., et al. (2000). The Household Economy Approach: The practitioners' guide.</li> <li>Course materials</li> </ul>

# Tentative schedule for the course

4 14	4. Understanding Food	Listen to a	• Boudreau,T., et
4 14	<ul> <li>4. Understanding Food Security/Insecurity</li> <li>4.1. The concept of food security/insecurity</li> <li>4.2. Paradigm shifts in the cconceptual understanding of food security</li> <li>4.2.1. Shifts from the Global and the National to the Household and the Individual food security</li> <li>4.2.2. Shift from a 'Food First' Perspective to a Livelihood Perspective</li> <li>4.2.3. Shift from Objective Indicator to Subjective Perception</li> <li>4.3. Current understanding of food security</li> <li>4.4. Pillars/Dimensions of food security</li> <li>4.4.1. Availability</li> <li>4.4.2. Access</li> <li>4.4.3. Utilization</li> <li>4.4.4. Stability</li> <li>4.5. Duration and Severity of Food Security</li> <li>4.6. Food Insecurity and Hunger, Undernourishment, and Malnourishment</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	<ul> <li>Boudreau, T., et al. (2000). The Household Economy Approach: The practitioners' guide.</li> <li>Course materials</li> <li>Babu, S., Gajanan, S., Sanyal, P., 2014. Food Security, Poverty and Nutrition Policy Analysis: Statistical Methods and Applications, second edition. ed.</li> </ul>
5	5. Measurement of Food Security	Listen to a lecture and take	• Frankenberger, T.R. (1992)
	5.1. Levels of food security	notes on the lesson, Forward	Indicators and data collection
	measurement (National, Household and Individual)	all the confusion	methods for
	5.2. National level measurement	or doubts trainee may have in	assessing household food
	5.2.1. Prevalence of	relation to the	security.
	undernourishment (PoU) 5.2.2. Global Hunger Index (GHI)	given lecture, take part in discussions	• World Food Programme (1999):

<ul> <li>5.2.3. Global Food Security Index (GFSI)</li> <li>5.3. Household level measurement</li> <li>5.3.1. Household survey food consumption data</li> <li>5.3.2. Dietary diversity Household Dietary Diversity Score (HDDS) Food Consumption Score (FCS)</li> <li>5.3.3. Coping Strategy Index (CSI)</li> <li>5.3.4. Household food insecurity access scale (HFIAS)</li> <li>5.4. Individual level measurement</li> <li>5.4.1. Measuring food utilization: anthropometry</li> </ul>		Emergency Needs Assessment Guidelines. FAO, 2017. Measuring Hunger at subnational levels from household surveys using the FAO approach.
<ul> <li>6. Response to Food Insecurity: Food and Livelihood Security Programing in Ethiopia</li> <li>6.1. Types of responses to food insecurity</li> <li>6.1.1. Humanitarian Response to Food Insecurity (Needs Based)</li> <li>6.1.2. Developmental Approach to Food Insecurity and Poverty (Market Based)</li> <li>6.1.3. Social Protection (Rights Based)</li> <li>6.2. The nature of food insecurity in Ethiopia</li> <li>6.3. Ethiopia's response to food insecurity</li> <li>6.4. Livelihoods and food security programs in Ethiopia</li> <li>6.4.1. Disaster Disk Reduction</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Dorosh, P., Rashid, S., 2012. Food and Agriculture in Ethiopia: Progress and Policy Challenges.

	(DRR)	
6.4.2.	Productive Safety Net	
	Program (PSNP)	
6.4.3.	Household Asset Building	
	Program (HABP)	
6.4.4.	Resettlement program	
6.4.5.	Other related programs	

#### LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

# Lecture

**Reflections:** Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.

**Homework:** Homework assignments will be given to help reinforce some topics covered and not covered in class individually and in group.

#### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (100%) which comprises relevant tests, assignments/ project works, quizzes, mid and final exam.

,	
Activities	Marks
Quiz 1	7%
Test 1	8%
Assignment and presentation	10%
Mid Exam	25%
Final Exam	50%
Total	100%

### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

# **COURSE POLICY**

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**Note on class attendance and participation:** You are expected to attend class regularly. I will take attendance on random days during the semester to ensure that students are coming to class, and if you miss class repeatedly, your grade will be affected. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. I will not allow you enter if you are late

more than five minutes. I will often ask questions during my lectures and active participation in class is essential.

**Cell phones:** Cell phones must be turned off before entering the class as they are disruptive and annoying to all of us in the class. So, please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources (where I provided you to read) may be the subject of assignment or final exam question items. Please follow the instructions indicated at each content of your course guidebook o complete all the assignments provided whether they are to be performed individually or in group.

# Reference

CARE (2002): Household Livelihood Security Assessments. A Toolkit for Practitioners.

De Satgé, R (2002). Learning about livelihoods Insights from southern Africa. Periperi Publications in South Africa and Oxfam GB in the UK.

Frankenberger, T.R. (1992). Indicators and data collection methods for assessing household food security. Part II in Simon Maxwell and Timothy

World Food Programme (1999): Emergency Needs Assessment Guidelines. Technical Support Services, Operations Department, the World Food Programme, Rome.

Boudreau, T., Lawrence, M., Holzmann, P., O'Donnell, M., Adams, L., Holt, J., Hammond, L. and Duffield, A. (2000). The Household Economy Approach: The practitioners' guide. The Food Economy Group and save the children UK

Babu, S., Gajanan, S., Sanyal, P., 2014. Food Security, Poverty and Nutrition Policy Analysis: Statistical Methods and Applications, second edition. ed.

DFID, 1992. Sustainable Livelihoods.

Dorosh, P., Rashid, S., 2012. Food and Agriculture in Ethiopia: Progress and Policy Challenges.

Ellis, F., Freeman, H., 2005. Rural Livelihoods and Poverty Reduction Policies.

FAO, 2017. Measuring Hunger at subnational levels from household surveys using the FAO approach. Smith, L., Subandoro, A., 2007. Measuring Food Security using Household Expenditure Surveys. International Food Policy Research Institute. Washington D.C.

# Approved by:

Name Course Instructor /Tutor

Name Course Chair

Name Program Manager

Signature

Signature

Signature



# BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

Program	Disaster Ri	Disaster Risk Management and Sustainable Development					
Courses code	Drms2030	Drms2030					
Courses Title	Community	y Based Disast	er Risł	k Management			
Degree Program	BSc. in Dis	aster Risk Ma	nagem	ent and Sustainal	ble Dev	elopment	
Module number	03						
Course chair	Tesfahun A	smamaw Kasi	e (Ph.	D)			
Instructor/Tutor	Asaye Yisr	naw Workie (N	A. Sc)				
ECTS credit (CP)	6						
Contact hours per term	Lectures	Tutorials	&	Laboratory	&	Home	Total
		seminars		workshop		Study	
	48	-		-		114	162
Lecture days, hours &				-			
room							
Tutorial /lab days & hour							
Target group	2 <sup>nd</sup> Year DRMSD Students						
Year /semester	2 <sup>nd</sup> Year/2 <sup>nd</sup> Semester						
Pre-requisites	-	-					
Status of the course	Major						

### **COURSE DESCRIPTION**

This course explores principles and practices in participatory approaches to disaster risk management; rationale for participation; rights and participatory development; stakeholder analysis; facilitation and training; community participation and disaster risk reduction; community based disaster risk management, problems of participatory disaster risk management, community mobilization, community organization, team building, and facilitation, leadership and exit strategies.

#### COURSE OBJECTIVES

At the end of the course students should be able to:

- Understand the concepts, elements and features of community based disaster risk management and community participation
- Develop skills of applying various PRA tools and techniques
- Describe community based risk assessment methods
- Explain community based disaster risk management planning, implementation, monitoring and evaluation processes.
- Understand on how to mainstream community based disaster risk management

# SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READINGS

Week	L. hr.	CONCEPTUAL FOCUS	Activities/tasks	Essential readings
1 & 2	5	Chapter 1: Basic concepts of community Participation Introduction 1.1 Community participation 1.2 Elements of community participation 1.3 Importance of community participation 1.4 Building community participation	involvement of students,	Asian Disaster Preparedness Center, (2001). Community Based Disaster Management: Course Participant Work Book, Partnership for Disaster Reduction South East Asia Program.
2, 3, & 4	8	<ul> <li>Chapter 2: Community participation in disaster risk management</li> <li>2.1 Community based approach</li> <li>2.2 Transforming at risk communities to disaster resilient communities</li> <li>2.3 Elements and features of community based disaster mitigation</li> <li>2.4 Appropriate methods to enhance community participation</li> </ul>	Discussions with active involvement of students, short note giving/taking, asking/answering questions, etc	
5 & 6	5	<ul> <li>Chapter 3: Overview of key concepts in community based disaster risk management</li> <li>3.1 Overview of disasters</li> <li>3.2 Community based disaster risk management processes from local authority's perspective</li> <li>3.3 Overview of local authorities</li> </ul>		
6, 7, 8 & 9	8	<ul> <li>Chapter 4: Community risks, needs and damage assessments</li> <li>4.1 Community risk assessment</li> <li>4.2 Disaster risk communication need assessment</li> <li>4.3 Damage, loss and need assessment</li> <li>4.4 Community risk assessment tools</li> </ul>	Discussions with active involvement of students, short note giving/taking, asking/answering questions, etc	
10	4	Chapter 5: Community disaster reduction planning 5.1 Concepts of planning 5.2 Concepts of community disaster reduction planning	involvement of students,	Disaster Management in
11, 12, 13 & 14	10	<ul> <li>Chapter 6: Community-managed implementation</li> <li>6.1 Community organizing</li> <li>6.2 Community training</li> <li>6.3 Community disaster information center</li> <li>6.4 Disaster risk communication by local authorities</li> <li>6.5 Early warning by local authorities</li> <li>6.6 Community disaster reduction fund</li> <li>6.7 Role of local authorities in community-based hazard mitigation</li> </ul>		WHO, (1999). Community Emergency Preparedness: A Manual for Managers
15	4	<b>Chapter 7: Monitoring and evaluation</b> 7.1 Monitoring 7.2 Evaluation 7.3 Coordination and linkage	Discussions with active involvement of students, short note giving/taking, asking/answering questions,	BASED DRM Field

			etc	Asian Disaster
				Preparedness Centre
				(ADPC).
		Chapter 8: Mainstreaming of community based	Discussions with active	ISDR, (2004). Living with
		disaster risk management	involvement of students,	Risk: A global review of
		8.1 Mainstreaming	short note giving/taking,	Disaster Risk Reduction
16	4	8.2 Actors in community based disaster risk	asking/answering questions,	Initiatives. 2004 Version,
		management	etc	Vol. 1
		8.3 Role of actors in community based disaster risk		
		management		
		8.4 Networking and coordination in community		
		based disaster risk management		

# LEARNING AND TEACHING METHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works

### ASSESSMENT METHODS

Evaluation will be carried out based on continuous assessment. The CA covers 50% and may comprise of relevant group assignment, quiz, test, mid examination and the final examination which is 50%. Summary of assignments, tests, quizzes and examinations

Assessment activities	Marks (%)
Group assignment	10
Quiz	7
Test	8
Mid examination	25
Final Examination	50
Total	100

\*Grading: As per Bahir Dar University's regulation

#### COURSE POLICY

All students are expected to abide by the code of conduct of students article 194 of The Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. You are expected to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. You will be given directions, if it is found necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. Attendance will be taken during the period of time this course is offered. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class.

So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or examination question items.

#### Approved by:

Name of course Instructor:	_Signature:
Name of course chair:	Signature:
Name of program manager:	Signature:

BAHIR DAR UNIVERSITY COLLEGE OF AGRICULTURE AND ENVIRONMENTAL SCIENCES								
Program		sk Management	and Sustainable D	evelopme	nt			
Courses code	Drms 2035							
Courses Title	Disaster Ri	sk Reduction						
Degree Program	BSc. Disast	er Risk Manage	ment and Sustaina	ble Develo	opment			
Module name	Disaster Ri	sk Management	I					
Module number	03							
Course chair								
Instructor/Tutor								
ECTS credit (CP)	5							
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total			
	48	-	-	74	122			
Lecture days, hours & room								
Tutorial /lab days & hour								
Target group	2 <sup>nd</sup> year DRMSD students							
Year /semester								
Pre-requisites								
Status of the course	Compulsory	7						

#### **Course description**

This course will equip students with theoretical knowledge, skill, competences of disaster risk prevention and mitigation activities. It also highlights the contribution of disaster risk prevention and mitigation to achieve broad based sustainable Development. Moreover, it presents different ideas and concepts of disaster risk reduction (prevention, mitigation, preparedness, vulnerability, coping strategies, resilient and others on one hand and their link to sustainable development on the other). Course Objectives: At the end of his course students will be able to:

- > Describe the concepts of risk assessment, risk mitigation and prevention
- > Explain the relationship between disaster prevention, mitigation and sustainable development
- Identify structural and non-structural mitigation strategies that help to reduce disaster risk and their limitations
- Recognize implementation challenges of DRR measures

# Tentative schedule for the course

1 cmuut		Conceptual focus	Assignment / Task	Reading
Week	Lecture	Conceptual locus	Assignment / Task	Keaunig
WEEK	(hr)			
W1-3	9	Chapter One Introduction to	Listen to a lecture	
W 1-5	9	Chapter One: Introduction to	and take notes on the	UNICDD (2000)
		Disaster Risk Reduction (DRR)		UNISDR. (2009).
		• Meaning and scope of DRR	lesson, Forward all	Global Assessment
		• Paradigm shift in DRR	the confusion or	Report on Disaster
		Global & National DRR	doubts trainee may	Risk Reduction,
		Agendas	have in relation to the	United Nations
		<ul> <li>HFA &amp; post HFA</li> </ul>	given lecture, take	International Strategy
		Frameworks	part in discussions	for Disaster
		<ul> <li>SDGs, Sendai</li> </ul>		Reduction.
		Framework & Paris		
		Agreement		
		• The link between disaster risk		
		and development		
		• Importance of Disaster Risk		
		Reduction		
W4-7	12	<b>CHAPTER TWO : Disaster Risk</b>	Listen to a lecture	Wisner, B., P.
		Profile	and take notes on the	Blaikie, T. Cannon,
		Hazard Assessment	lesson, Forward all	and I. Davis. (2004).
		Vulnerability Assessment	the confusion or	
		<ul> <li>Capacity assessment</li> </ul>	doubts trainee may	PELLING, Mark and
		<ul> <li>Risk assessment</li> </ul>	have in relation to the	Wisner, Ben (2008)
			given lecture, take	Disaster Risk
		Multi-hazard vulnerability and     risk assessment	part in discussions	Reduction: Cases
		risk assessment	Woreda risk profile	from Urban Africa.
		• Risk perception and attitude	of Ethiopia	Earthscan
		assessment	or Zumopiu	Publications Ltd.,
				London, UK.
W8-	9	CHAPTER THREE : Resilience	Listen to a lecture	Wisner, B., P.
10	-	Assessment	and take notes on the	Blaikie, T. Cannon,
10		<ul> <li>Concepts and approaches</li> </ul>	lesson, Forward all	and I. Davis. (2004).
		<ul> <li>Adaptation and resilience</li> </ul>	the confusion or	und 1. Duvis. (2001).
		<ul> <li>Linkage between hazards,</li> </ul>	doubts trainee may	
		-	have in relation to the	
		<ul><li>vulnerability and resilience</li><li>Resilience framework</li></ul>	given lecture, take	
		Resilience framework	part in discussions	
W11-	12	CHAPTER FOUR: Disaster Risk	Listen to a lecture	PELLING, Mark and
14		Mitigation/Prevention Measures	and take notes on the	Wisner, Ben (2008)
<b>A</b> f			lesson, Forward all	Disaster Risk
		• Key steps in designing	the confusion or	Reduction: Cases
		mitigation/prevention strategies	doubts trainee may	from Urban Africa.
			have in relation to the	Earthscan
		e i	given lecture, take	Publications Ltd.,
		Approaches	part in discussions	London, UK.
		• Structural risk reduction	part in discussions	Lonuon, OK.
		measures	Group discussion	
		• Resistant constructions,	Group discussion	Twice I 2004 Cost
		building codes and	using Case Studies	Twigg, J. 2004. Good

		1,		
		regulatory measures		Practice Review:
		• Structural/Physical		Disaster Risk
		modifications and		Reduction –
		retrofitting		Mitigation
		<ul> <li>Relocation in</li> </ul>		
		construction of		
		community shelters		
		• Construction of barriers,		
		deflections or retention		
		systems (Dams and		
		reservoirs, levees and		
		flood walls, retaining		
		walls, diversion		
		channels)		
		Non-structural risk reduction		
		measures		
		• Disaster preparedness		
		• Hazard detection and		
		early warning system		
		• DRM policies, plans and		
		programs		
		$\circ$ Risk assessment and		
		insurance		
		• Community awareness		
		and educational		
		programs		
W15-	6	<b>CHAPTER FIVE :</b> Actors	Listen to a lecture	Twigg, J. 2004. Good
16		involved in DRR Programs	and take notes on the	Practice Review:
		• GOs	lesson, Forward all	Disaster Risk
		NGOs	the confusion or	Reduction –
		• UN agencies	doubts trainee may	Mitigation
		Private sector	have in relation to the	
		Risk-prone communities	given lecture, take	
			part in discussions	

### LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works

- 1. Lecture
- 2. Reflections: Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.
- 3. Home work: Assignments will be given to help reinforce some topics covered or not covered in class

# ASSESSMENT METHODS

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, assignments; project works, quizzes and final exam.

Activities	Marks
Test	8%
Quiz	7%
Assignment	10%
Group project	25%
Final Exam	50%
Total	100%

SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

#### **Course Policy**

All students are expected to abide by the code of conduct of students (Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

#### Reference

- 1. Twigg, J. 2004. Good Practice Review: Disaster Risk Reduction Mitigation
- 2. Wisner, B., P. Blaikie, T. Cannon, and I. Davis. (2004). "At Risk: Natural Hazards, People's Vulnerability and Disasters (2nd Ed.)." Rutledge, London, UK.
- 3. Shaw R, Rahman A, Surjan A, Parvin GA. 2016. Urban Disasters and Resilience in Asia. Elsevier, New York.
- 4. R.S.Stephenson (1994). Disasters and Development. UNDP Disaster Management Training Programme. 2nd Edition
- 5. Rahman A, Khan AN, Shaw R. 2015. Disaster Risk Reduction Approaches in Pakistan. Springer, Tokyo
- 6. UNISDR. (2009). Global Assessment Report on Disaster Risk Reduction, United Nations International Strategy for Disaster Reduction.
- 7. Comprehensive Risk Assessment for Natural Hazards. World Meteorological Organization 2006.
- 8. PELLING, Mark and Wisner, Ben (2008) Disaster Risk Reduction: Cases from Urban Africa. Earthscan Publications Ltd., London, UK.

# **Approved by:**

Name Course Instructor /Tutor

Name Course chair

Name Program manager

Signature

Signature

Signature



#### BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

			T AND FOOD SECUN		1120			
Program	Disaster H	Disaster Risk Management and Sustainable Development						
Courses code	Drms 202	Drms 2023						
Courses Title	Climate S	cience and Agro M	eteorology					
Degree Program	BSc. in Di	isaster Risk Manag	ement and Sustainable l	Developmer	nt			
Module name	Supportiv	ve Courses						
Module number	02							
Course chair								
Instructor/Tutor								
ECTS credit (CP)	redit (CP) 4							
Contact hours	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total			
	48	-	-	55	103			
Lecture days, hours & room	-							
Tutorial /lab days & hour								
Target group	Target group       2 <sup>nd</sup> year Disaster Risk Management and Sustainable Developmen         Students       Students							
Year /semester	2 <sup>nd</sup> Year,	1 <sup>st</sup> Semester						
Pre-requisites								
Status of the course	Major							

#### **Course Description**

The main purpose of this course is to introduce the basic mechanisms that influences Earth's climate, including Earth's atmosphere, Atmospheric moisture, Air pressure and wind system, atmospheric circulation, wind patterns and rain producing system, El Niño and the Southern Oscillation, Air masses, cyclones and the climate of tropics. This aims to enable students to understand and explain the basic climate sciences and implement in the climate related risk analysis.

# **Objectives**

Up on the successful completion of this course the students will be able to;

- Understand and apply basic physical principles in climate science.
- Explain about weather and climate system of the tropical Africa.
- Identify and critically assess the issue of climate related risks and its impact on society.

Week	Lecture(hrs)	URE TOPICS, ACTIVITIES AND R Contents	Activities/tasks	Readings
				ixeauiiigs
W1-2	6	<b>Chapter 1.</b> The Earth's atmosphere	Active participation during lecturing,	
		1. Overview of Earth's	group discussion,	
		Atmosphere	take notes from	
		2. Vertical Structure of the	lecture	
		Atmosphere		
		3. Warming the Earth and		
		the Atmosphere.		
		4. Energy, Temperature, and		
		Heat.		
		5. Heat Transfer in the		
		Atmosphere		
		6. Seasonal and daily		
		temperatures		
W3-5	6	Chapter2. Atmospheric	Active participation	
		Humidity, cloud development and	during lecturing,	
		precipitation	group discussion,	
		1. Evaporation and	take notes from	
		condensation.	lecture and hand-in	
		2. Humidity	assignment	
		3. cloud development		
		4. Precipitation process type		
		and measurement.		
W6-7	6	Chapter3. Air pressure and wind	Active participation	
		system	during lecturing,	
		1. Atmospheric pressure	group discussion,	
		2. why the wind blow	take notes from	
		3. Surface winds	lecture	
		4. Scale of atmospheric		
		motion		
W8-10	9	5. Local wind system <b>Chapter4.</b> Atmospheric	Active participation	
W 0-10		circulation	during lecturing,	
		1 Global wind system	group discussion,	
		2 General circulation of the	take notes from	
		atmosphere	lecture and hand-in	
		2.1. single-cell model	assignment	
		2.2. three cell model	8	
		3 Global precipitation		
		system		
		4 Easterly and Westerly		
		wind system		
		5 Jet stream		
		6 Global Wind Patterns and		
		the Oceans.		
		7 Winds and Upwelling.		
		8 El Niño and the Southern		
		Oscillation		

# SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READINGS

W11-	6	Chapte	er 5. Air Masses, Fronts	Active participation	
12	-	and Cy		during lecturing,	
			Air masses classification	group discussion,	
		2.	basic concepts of Fronts	take notes from	
		3.	Middle-Latitude Cyclones	lecture	
		4.	Tropical Cyclones		
W13-	9	Chapte	r 6 . Climate of tropical	Active participation	
15		Africa		during lecturing,	
		1.	Introduction : The	group discussion,	
			geography of the tropics.	take notes from	
		2.	The tropical troposphere.	lecture and group	
		3.	The weather patterns and	presentation	
			climates of the tropics.		
		4.	The Subtropical Jet		
			Streams		
		5.	Synoptic-scale Weather		
			Systems.		
			1. The inter-tropical		
			convergence zone		
			(ITCZ)		
		6.	Rainfall seasons and		
			ITCZ in Ethiopia.		
		7.	Effect of El Niño–La		
			Niña to Ethiopian		
			Rainfall season		

# **INSTRUCTIONAL METHODS**

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation.

#### ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

#### Assessment methods and their value

Test	8%
Quiz	
Assignment	
Mid Exam	25%
Final exam	50%

Grading: is as per the university regulation

All students are expected to abide by the code of conduct of students (Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

# References

- Ahrens, C. D., and R. Henson, 2019: *Meteorology today: an introduction to weather, climate, and the environment*. Twelfth edition. Cengage, 1 pp.
- Ahrens, C. D., and R. Henson, 2018: *Essentials of meteorology: an invitation to the atmosphere*. Eighth edition. Cengage Learning, 509 pp.
- Galvin, J., 2016: *An introduction to the meteorology and climate of the tropics*. John Wiley & Sons, Inc, 308 pp.

 Krishnamurti, T. N., L. Stefanova, and V. Misra, 2013: *Tropical meteorology: an introduction*. Springer, 423 pp.

Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Department head

Signature

Signature

Signature



# BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

Program	Disaster Risk Management and Sustainable Development						
Courses code	Drms303	Drms3037					
Courses Title	Emergenc	y Preparedness	& Res	sponse			
Degree Program	BSc. in D	isaster Risk Ma	nagem	ent and Sustainal	ble Deve	elopment	
Module name	Conceptu	al Understandin	g of D	visaster Risk Man	agemen	t	
Module number	03						
Course chair							
Instructor/Tutor							
ECTS credit (CP)	4						
Contact hours	Lectures	Tutorials seminars	&	Laboratory workshop	&	Home Study	Total
	48	-		-		55	103
Lecture days, hours & room	-						
Tutorial /lab days & hour							
Target group	3 <sup>rd</sup> year D	visaster Risk Ma	nagem	ent and Sustaina	ble Deve	elopment Stu	dents
Year/semester	3 <sup>rd</sup> Year,	1 <sup>st</sup> Semester					
Pre-requisites	None						
Status of the course	Major						

# **Course Description**

This course describes the emergency preparedness planning process that provides generic procedures for managing unforeseen impacts that is periodically adapted to changing circumstances and that provides a guide to the protocols, procedures, and division of responsibilities in emergency response and recovery. The purpose is to strengthen disaster preparedness for response, to take action in anticipation of events, and ensure capacities are in place for effective response and recovery at all levels. The main outcome will be Preparing students to be future leaders in the Emergency Response fields that can prepare disaster risk management plan that clearly encompasses preparedness for response.

# Objectives

Up on the successful completion of this course the students will be able to;

- Understand the Acts of God- acts of nature of interpretation of hazards, risks and disasters;
- Understand the concepts and theories of disaster emergency management;
- Become familiar with the emergence of humanitarianism, humanitarian principles and NGO code of conduct, humanitarian charter including Sphere Standards;
- Become familiar with methods and tolls of planning and be familiar with disaster emergency planning
- Understand scenario and contingency planning;
- Understand the contingency planning processes and stakeholders in the Ethiopian emergency management system.

# SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READINGS

Schedule of lecture topics, Activities and readings								
Week	Lecture	Conceptual focus	Activities/tasks	Reading				
*** 1	(hrs)							
Week	3	CHAPTER 1: ORIGION AND THEORY						
1		OF DISASTER						
		1.1 Theory of the God- nature- human						
		induced disaster debate						
		1.2 Modern understanding of disasters						
	6	CHAPTER 2: CONCEPTS AND ORIGIN	Listen to a	UNISDR				
		OF EMERGENCY	lecture and take	Terminology on				
		2.1Concepts and definitions of disaster and	notes on the	Disaster Risk				
Week		emergency management (discussions, group	lesson,	Reduction				
2-3		assignments),		(2009), Red cross				
		2.2 The origin of relief response		publications,				
		2.3 The International Red Cross and Red						
		Crescent Humanitarianism						
		2.4 Code of Conduct for the International						
		Red Cross and Red Crescent Movement						
		and NGOs in Disaster Response						
	-	Programmes						
Week	9	CHAPTER 3: HUMANITARIAN	Listen to a	Humanitarian				
4-6		TRENDS AND DILEMAS	lecture and take	Charter and				
		3.1 The history and origins of contemporary	notes on the	Minimum				
		humanitarianism	lesson, Forward	Standards in				
		3.2 Fundamental principles of humanitarianism	all the confusion	Humanitarian				
		3.3 Roles of Key United Nations Agencies	or doubts trainee	Response, Third				
		Emergency Response	may have in	edition 2011.				
		3.4 Principles of Humanitarian Action	relation to the					
		Needs versus resources	given lecture,					
		Neutrality	take part in					
		Standards and codes	discussions					
		3.5 Role of Sphere Standard						
		3.6 Trends in humanitarian Assistance						
		3.76 Donors, recipients and sect oral						
		distribution of humanitarian aid						
	_	3.8 Humanitarian Challenges in the Future						
Week	9	CHAPTER 4: DISASTER AND	Active	Adams, J. 1994.				
7-9		EMERGENCY PLANNING	participation	At Risk. UCL				
			during lecturing,	Press, London				
			group discussion,	Blaikie, P. 1994.				
		4.1 concepts and definitions of planning;	take notes from	At Risk. Natural				
		4.2 understanding planning and its tools	lecture and	Hazards,				
		4.3 Concepts and principles of disaster	assignment	People's				
		emergency planning ;	presentation	Vulnerability,				
		4.4 The science of scenario planning		and Disasters.				
		4.5 Contingency planning		Rutledge,				
		4.6 Emergency action planning		London.				
		4.7 Actors in Emergency planning		Sendai				
		4.8 Community preparedness and response		Framework for				
		JI I I I I I I I I I I I I I I I I I I						

				Disaster Reduction 2 2030	Risk 2015-
Week 10-13	12	CHAPTER5:EMERGENCYPREPAREDNESS AND MANAGEMENTIN ETHIOPIA5.1Early warning information and emergency planning;5.2Emergency planning and decision- making;5.3Emergency preparedness planning;5.4Contingency scenario planning;5.5Actors I emergency planning;5.6governance and response mechanisms in Emergency planning;5.7Identify and describe the Ethiopian contingency planning processes and stakeholders in the Ethiopian emergency management system.	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation		
Week 14-15	6	<ul> <li>CAPTER 6: NATIONAL INCIDENT SYSTEM (CASE STUDY)</li> <li>6. 1 Ethiopian context NIMS content</li> <li>6.2 Multi agency coordination platform and actions</li> <li>6.3 Emergency operation centers</li> <li>6.4 Incident command systems</li> <li>6.5 Comprehensive emergency preparedness and response plan</li> <li>6.6 All hazard incident management teams</li> </ul>			
Week 16	3	<ul> <li>Chapter 6: Internship and volunteerism</li> <li>programs</li> <li>6.1 concepts volunteerism and internship</li> <li>programs</li> <li>6.2 Practices of volunteerism and internship</li> <li>programs;</li> </ul>	Fieldwork exercise & report writing	Assessment stakeholders organization	and

# **INSTRUCTIONAL METHODS**

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation, and field work.

# ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

Assessment methods and their value

Test	
Quiz	7%
Assignment	
Assignment	10 /0

Mid Exam	25%
Final exam	50%

# Grading: is as per the university regulation

All students are expected to abide by the code of conduct of students (Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

#### References

Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Department head

Signature

Signature

Signature



#### BAHIR DAR UNIVERSITY COLLEGE OF AGRICULTURE AND ENVIRONMENTAL SCIENCES

Program Disaster Risk Management and Sustainable Development								
Courses code	Drms3061	Drms3061						
Courses Title	Sociology of Disaster							
Degree Program	BSc. in Di	isaster Risk Man	age	ment and Sustainable	e D	evelopmen	t	
Module name	Conceptu	al Understanding	g of	Disaster Risk Manag	gen	nent		
Module number	06							
Course chair								
Instructor/Tutor								
ECTS credit (CP)	4							
Contact hours per week	Lectures	Tutorials	&	Laboratory	&	Home	Total	
		seminars		workshop		Study		
	48	-		-		60	108	
Lecture days, hours & room	-							
Tutorial /lab days & hour								
Target group	<b>3</b> r <sup>d</sup> Year Disaster Risk Management and Sustainable Development Students							
Year /semester	1 <sup>st</sup> Semester							
Pre-requisites Anth1011								
Status of the course	Major	Major						

# **Course Description:**

This course explores sociology and the study of disaster, social systems and ecological networks and disaster. It also tries to analysis the role of ideology and disaster myths, realities and cultural representation of disaster and deals about the impacts of disaster on social system and the vice versa, Social Stratification and disasters, and the role of Social Capital theory in disaster management.

# **Course Objectives:**

After completing your study on this course, you should be able to:

- Explain about the sociology of disaster
- Analysis the link of social system, ecological networks with disaster
- Describe the role of ideology in disaster management
- Understand the framework for thinking about disaster in sociological perspective
- Elaborate the impacts of disaster on social system and vice versa

Schedule of lecture topics, Activities and readings								
Week	Lecture (hrs)	Conceptual focus	Activities/tasks	Reading				
W1-3	9	Chapter 1: INTRODUCTIN	Active	Handout				
		-Sociology and the Study of Disasters	participation	compiled				
		-Social System, Ecological Networks and Disaster	during lecturing,	by the				
		-Role of Ideologies (Faith, Belief and Religion) in	group discussion,	teacher				
		Disasters	take notes from					
		Myths, Realities and Cultural Representation of	lecture and					
		Disaster	assignment					
		Chapter 2:SOCIOLOGICAL PERSPECTIVE ON	presentation					
		DISASTER						
W4-5	6	Structural Functionalism						
		Conflict Perspective						
		Symbolic Interactionism Perspective						
		Human Ecology						
		Political Economy						
		Chapter 3: IMPACTS OF DISASTERS ON						
		SOCIAL SYSTEM						
W6-8	9	-Behavioral Response to Disaster	Active	Handout				
		✓ The Panic Misconception	participation	compiled				
		✓ The Looting Misconception	during lecturing,	by the				
		✓ Unreliability of Emergency Workers	group discussion,	teacher				
		✓ The "Disaster Syndrome" Misconception	take notes from					
		✓ Belief on Media	lecture and					
		✓ Imposition of Martial Law	assignment					
		-Trauma: Individual, Social and Cultural	presentation					
		-Disaster and Displacement (Local and						
		International)						
		-Impacts on Social Fabric of Society						
		-Consequences of Post disaster relocation and						
		prospects for recovery						
		-Linking Disasters within Contemporary Social						
		Problems						
		Chapter 4: SOCIAL STRATIFICATION AND						
		DISASTERS						
W9-	9	-Linkages between Social Vulnerability and	Active	Handout				
11		Inequality	participation	compiled				
		-Disasters and Social Class (Race, Creed, Caste and	during lecturing,	by the				
		Economic groups)	group discussion,	teacher				
		- Gender Inequality and Disaster	take notes from					
		-Disasters, language barrier and disabilities	lecture and					
		-Disasters as an agent of social change	assignment					

		Chapter 5: SOCIAL CAPITAL AND DISASTER	presentation	
W12- 14	9	<ul> <li>Definition, Features and Theories of social change.</li> <li>Definitions, forms, and measurement of social capital</li> <li>Social capital, neoliberalism, and rational choice theory</li> <li>Role of Social Capital in Disaster Management</li> <li>chapter 6: VULNERABILITY, PERCEPTION AND DISASTER</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	Handout compiled by the teacher
W15- 16	6	<ul> <li>-'Vulnerability': A Matter of Perception</li> <li>-Various views on 'vulnerability' and its users</li> <li>-Local people's perception of 'vulnerability'</li> <li>-People's perception of risk</li> <li>-Theories of Social Vulnerability</li> <li>Vulnerability: The importance of terminology</li> <li>Vulnerability and lack of development</li> <li>Social Vulnerability</li> <li>Measurement of Vulnerability and Assessment of its Alleviation</li> <li>The Fischer Disaster Scale</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	Handout compiled by the teacher

# **INSTRUCTIONAL METHODS**

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation, and field work.

# ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

# Assessment methods and their value

Test	8%
Ouiz	7%
Assignment	10%
Mid Exam	25%
Final exam	50%

Grading: is as per the university regulation

All students are expected to abide by the code of conduct of students (Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from

your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

# References

- 1. ANDERSEN, ML. and Dana, Hysock (2006) Thinking about Women: Sociological Perspectives on Sex and Gender. Allen & Bacon, New York.
- 2. ALBROW, Martin (1999) Sociology the Basic. Routledge, London.
- 3. BROOM, Leonard and Selznick (1990) Sociology. Harper and Row Publisher, London.
- 4. FISCHER, Henry W. (1998) Response to Disaster: Fact versus Fiction & Its Perpetuation. The Sociology of Disaster. 2nd Edition. University Press of America, Lanham, Maryland

# Approved by:

Name Course Instructor /Tutor

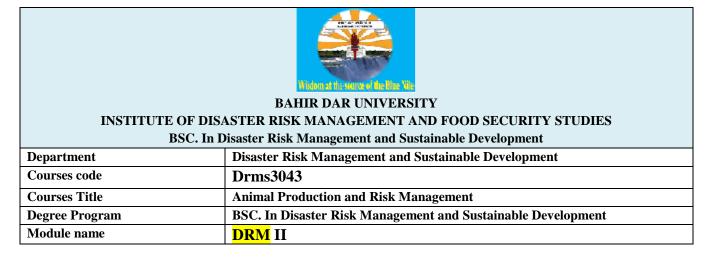
Name Course chair

Name Department Head

Signature

Signature

Signature



Module number	04							
Course chair	Dr. Tesfa	hun Asmama	W					
Instructor/Tutor								
CP credit (CP)	6							
Contact hours per week	Lectures	Tutorials seminars	&	Laboratory practical	&	Home Study	Total	
	32	-		16		144	192	
Lecture days, hours & room	2	2						
Tutorial /lab days & hour	3	3						
Target group	3 <sup>rd</sup> Year	3 <sup>rd</sup> Year Disaster Risk Management and Sustainable Development						
Year /semester	3 <sup>rd</sup> Year, 1 <sup>st</sup> Semester							
Pre-requisites	None	None						
Status of the course	atus of the course Major							

# **Course description**

The main purpose of course will explore the global animal production, many roles of domestic animals and the importance of their interdependence with humans; appreciate the scope, diversity, and problems related to domestic animal production systems; Economics of livestock production; practice using scientific literature to research issues in sustainable agriculture, and know how to continue learning about sustainable animal systems. Topics include domestication, sustainability, companion animals, sheep, goats, swine, beef cattle, dairy cattle, nutrition, genetics, grazing, dairy products, poultry, horses and draft animals and bees.

Risk management in animal production sectors, epidemic disasters distribution and losses; framework animal risk management; describe animals care to be taken in disaster which include creation of new management practices and emergency response tools, the implementation of an emergency fund and promoting a culture of prevention. A etiology, epidemiology, symptoms, diagnosis, prevention and control of external and internal parasite of farm animals with a special focus on ticks, mites, insects, helminthes and protozoa of tropical importance. Infectious diseases farm animals caused by bacteria, virus and rickettsia, zoonotic diseases of public health and non-infections disease importance, prevention and control. Herd health risk management strategies which include monitoring/assessment, documentation of diseases of concern for the farm, vaccination strategy for various age groups on the farm, vaccination and treatment strategies for animal additions, vaccination and treatment strategies for animal additions, vaccination and records for vaccines and drugs and appropriate disposal of empty and out-dated product containers.

# **Course Objectives:**

At the end of the course students should be able to:

- Able to explain the economic significance of domestic animals in Ethiopia
- Describe the different animal production systems
- Know the key epidemics of domestic animals in Ethiopia
- Explain the losses animals attributes due to the prevailing epidemics
- Know the key animal risk management strategies

Week	Lecture	CONCEPTUAL FOCUS	Activity	READINGS
S	(hrs)			
W1, 2 and 3	6	<ul> <li>Chapter 1: Introduction to animal production</li> <li>1.1. Economic importance of animal production</li> </ul>	Visit of various farms and develop case studies on significant	1. FAO. 2011. A value chain approach to animal diseases RM – Technical foundations and practical framework for field
		<ul> <li>1.2. Drivers &amp; trends of livestock production</li> <li>1.3. Diversity of animals</li> <li>1.4. Domestic and wild animals</li> <li>1.5. Higher and small animals</li> </ul>	important of the country economy	application. Animal Production & Health Guidelines. No. 4. Rome. PP. 135
W4,5, 6 and 7	8	<ul> <li>Chapter 2: Animal Production systems</li> <li>2.1. Production system based on animals nature</li> <li>2.1.1. Dairy production system</li> <li>2.1.2. Beef production</li> <li>2.1.3 Sheep and goats production</li> <li>2.1.4. Poultry production</li> <li>2.1.5. Apiculture production</li> <li>2.1.5. Apiculture production system</li> <li>2.2. Characterization of systems obtaining animal products</li> <li>2.2.1 Exploitation</li> <li>2.2.2. Intensive</li> <li>2.2.3. Pastoralism</li> <li>2.2.4. subsistence farming</li> <li>2.2.5.Ranching</li> <li>2.2.6. transitional</li> </ul>	Visit various animal production system and characterize the visited farming system on their visit report	1. Seinfeld, H., Wassenaar, T. and Jutzi, S. 2006. Livestock production systems in developing countries: status, drivers, trends. Rev. Sci. tech. Off. int. Epiz.,25 (2), 505-516
W8,9 &10	6	<ul> <li>2.2.7. intensive</li> <li>Chapter 3: Common Animal parasites and diseases in Ethiopia</li> <li>3.1. A External and internal parasite of farm animals</li> <li>3.2. Etiology, epidemiology, symptoms, diagnosis, prevention and control of external and internal parasite of farm animals</li> <li>3.3. Infectious diseases farm animals</li> <li>3.4. Non-infectious diseases of farm animals</li> </ul>	Describe the major animal production risks in in the visited farm	<ol> <li>FAO. 2011. A value chain approach to animal diseases risk management – Technical foundations and practical framework for field application. Animal Production and Health Guidelines. No. 4. Rome. PP. 135.</li> <li>David, K. 2013. Managing risk in farming. Farm management extension guide. No. 3. Food and Agriculture organization of the United Nations. Rome.PP.120</li> </ol>

<b>W</b> 711	T		Davalan	1 David K 2012 Managing sight
W11, 12,13,	12	Chapter 4: Risk management in animal production	Develop case study on key	1. David, K. 2013. Managing risk in farming. Farm management
12,15, 14;15		sectors	study on key animal	extension guide. No. 3. Food
&16		<ul> <li>4.1. Animal epidemics distribution and losses assessment</li> <li>4.2. Framework animal risk management</li> <li>4.3. Animal health risk management strategies</li> <li>4.3.1.Monitoring/assessment,</li> <li>4.3.2. Documentation of diseases of concern for the farm,</li> <li>4.3.3. Animal quarantine</li> <li>4.3.4. Vaccination strategy for various age groups on the farm,</li> <li>4.3.5.Vaccination &amp; treatment strategies for animal additions,</li> <li>4.3.6. Vaccination &amp; treatment strategies for animal movements,</li> <li>4.3.7. Meat &amp; milk withholding times/strategies,</li> <li>4.3.8. Proper storage and records for vaccines &amp; drugs</li> <li>4.3.9. Appropriate disposal of empty and outdated product containers</li> </ul>	animal production risks and suggest effective risk management strategies for various animal farming systems	<ul> <li>and Agriculture organization of the United Nations. Rome.PP.120</li> <li>2. Jeremy, S., Stephan, B. and Yongong, L. 2005. Pastoral RM. FAO Rural Institutions and Participation Service. Pp. 73.</li> <li>3. Wang, J. and Abdur, R. 2018. Risk Management in Agriculture: Theories and Methods. Science Publishing Group 548 Fashion Avenue New York, NY 10018, U.S.A. PP.350.</li> </ul>

## **Methods of Teaching**

**Case study:** Some farm case studies will be presented by students and students will be encouraged to carry out farm animal risk assessment. This is essential in order to understand climate change impact on different sectors, on human welfare and derive policy options, Conflict of interest in climate issues

## **Practical exercises**

• Field visits will be conducted (to show various farm risks to the students).

## Course delivery and study load

• The course will be delivered with formal lectures as well as practical exercises, assignments, group discussions, presentations and paper review.

## **Course assessment**

Evaluation is carried out on continuous assessment base

## Assessment methods and their value

Quiz -----7%

Test	
Field Report	
Mid Exam	
Final exam	50%

Grading: is as per the university regulation

#### **Course Policy**

All students are expected to abide by the code of conduct of students (article 194, 195, 196, 197, 198 and 199, of the Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Since the course does have a number of practical exercises in the laboratory, students are urged to attend every practical session. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

#### **References**

- David, K. 2013. Managing risk in farming. Farm management extension guide. No. 3. Food and Agriculture organization of the United Nations. Rome.PP.120
- FAO. 2011. A value chain approach to animal diseases risk management Technical foundations and practical framework for field application. Animal Production and Health Guidelines. No. 4. Rome. PP. 135.
- Jeremy, S., Stephan, B. and Yongong, L. 2005. Pastoral risk management. FAO Rural Institutions and Participation Service. Pp. 73.
- Natural Resources Institute and University of Greenwich.2016. Managing risks improving farmers' livelihoods. Platform for Agricultural Risk Management.United Kingdom. PP. 128
- Steinfeld, H., Wassenaar, T. and Jutzi, S. 2006. Livestock production systems in developing countries: status, drivers, trends. Rev. sci. tech. Off. int. Epiz., 2006,25 (2), 505-516

Wang, J. and Abdur, R. 2018. Risk Management in Agriculture: Theories and Methods. Science Publishing Group 548 Fashion Avenue New York, NY 10018, U.S.A. PP.350.

Approved by:

Name Course Instructor /Tutor

Name Course chair

Signature

Signature

Name Department Head

Signature

BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES BSC. In Disaster Risk Management and Sustainable Development								
Department	Disaster F	Risk Management	and	Sustainable Developm	ent			
Courses code	Drms30	42						
Courses Title	Crop Pro	duction and Risk	man	agement				
Degree Program	BSC. In D	)isaster Risk Man	agen	ent and Sustainable D	evelopment			
Module name	DRM II							
Module number	04							
Course chair	Dr. Tesfa	hun Asmamaw						
Instructor/Tutor								
CP credit (CP)	6							
Contact hours per week	Lectures	Tutorials seminars	&	Laboratory & practical	: Home Study	Total		
	32	-		16	144	192		
Lecture days, hours & room	2							
Tutorial /lab days & hour	Tutorial /lab days & hour 3							
Target group2ndYear Disaster Risk Management and Sustainable Development						;		
Year /semester	2 <sup>nd</sup> Year, 1 <sup>st</sup> Semester							
Pre-requisites	None							
Status of the course	Major							

## **Course Description**

The main purpose of the course will be to describe crop production concepts, practices and types of major crops (cereals, pulses, oil crops, root ant tuber crops, vegetable crops, fruit crops and spices) grown in Ethiopia. Factors influencing crop growth and development and Cropping seasons and systems will be described.

Explaining the Concepts of crop production risks and five sources of crop production risks (production, price, financial, institutional and personal). Describing Crop production risk management strategies like Enterprise Diversification, Crop Insurance and use of new technologies. Various Agricultural Risk Management tools can be describe based on the approach taken to deal with them, i.e. prevention and mitigation (or risk reduction), mitigation and adaptation (or coping).

## **Course Objectives:**

At the end of the course students should be able to:

- Know major crops grown in Ethiopia
- Explain factors influencing plant growth and development
- Explain different cropping systems and cropping seasons
- Describe various types of prevailing risks in Ethiopian agriculture system and cropping season
- Know various types of risk management strategies and tools for each key crop production risks
- Know about climate smart agriculture conceptual framework

Weeks	Lecture	CONCEPTUAL FOCUS	Activity	READINGS
	(hrs)			
W1, 2 &	6	Chapter 1: Introduction	Visit various crop	1. Onwueme, IC. and shiba, T.D.
3		1.1. Economic important crops in	farms and	<b>A A</b>
		Ethiopian Agriculture	understand the	Tropical Africa. CAT. 470.
		1.2. Major challenges & potentials of	production	2. Sunday Gbenga Aderibigbe .
		Crop production	systems and	2018. Principles of crop
		<b>1.3.</b> Types of crop s produced in	farming practices	production. PP.32.
		Ethiopia		
		<b>1.3.1.</b> Cereal crops		
		<b>1.3.2.</b> Pulse crops		
		<b>1.3.3.</b> Oil crops		
		<b>1.3.4.</b> Root and Tuber crops		
		<b>1.3.5.</b> Vegetable crops		
		<b>1.3.6.</b> Fruit crops		
		<b>1.3.7.</b> Industrial crops		
W 4, 5 &	6	Chapter 2: Factors influencing	Visit crops	1. FAO. 2013. CLIMATE-
6		Crop growth & Development	affected by	SMART AGRICULTURE
		<b>2</b> .1. Effect of Climate and Weather	various weather	Source book. PP. 570
		2.1.1 Air temperature	and edaphic	2. Onwueme, IC. and shiba, T.D.
		2.1.2. Solar Radiation	factors then	1991. Field crop production in
		2.1.3.Light intensity and	develop scenario	Tropical Africa. CAT. 470.
		Duration	on factors	_
		2.1.4. Precipitation	influencing the	
		2.1.5. Wind	growth and	
		2.1.6. Composition of the	development of	
		atmosphere	various crops	

				I
		2.2. Effect of Edaphic factors		
		2.2.1. Soil aeration		
		2.2.2. Soil Temperature		
		2.2.3. Soil moisture		
		2.2.4. Soil Reaction		
		2.2.5. Mineral nutrient supply		
		2.3. Growth factors & crop yield		
		2.3.1. Low of Minimum		
		2.3.2.Law of Limiting factors		
W7&8	4	Chapter 3: Cropping season and	Visit various	1.FAO. 2013. CLIMATE-
W/&0	4	Cropping systems	cropping systems	SMART AGRICULTURE
			and estimate the	Source book. PP. 570
		1		
		Cropping systems	contribution of	3. Onwueme, IC. and
		3.2. Types of Cropping systems	yield in the	shiba,T.D. 1991. Field crop
		3.2.1. Mono cropping systems	country economy	production in Tropical Africa.
		3.2.2. Double cropping systems		CAT. 470.
		3.2.3. Alley cropping systems		
		3.2.4. Crop rotation system		
		3.2.5. Mixed cropping systems		
		3.2.6. Fallow system		
		3.3.Cropping season		
		3.3.1. Maher cropping season		
		3.3.2. Irrigation cropping season		
		3.3.3.Belg cropping season		
		3.3.4.Residual cropping season		
W9,10	6	Chapter 4: Crop production risks.	Case development	1. Wang, J. and Abdur, R. 2018.
&11	0	4.1. Production risks,	and presentation	Risk Management in
an		4.1.1. Climatic risks (Drought &	on key Crop	Agriculture: Theories and
		Flood)	production risks	Methods. Science Publishing
		4.1.2. Biological Risks (Pests like	production msks	Group 548 Fashion Avenue
		insect pests, diseases, weeds &		New York, NY 10018, U.S.A.
				PP.350.
		vertebrate pests)		FF.550.
		4.2. Price risks,		
		4.3. Financial risks,		
		4.4. Institutional and		
<b>W</b> (0,10,11		4.5. Personal risks	<b>D</b> 111 1	
W9,10,11	8	Chapter 5: Crop production risk	Describing key	1. Kisan, G. 2016. Agricultural
, 12 &		management strategies and tools	risks of various	Risk Management Tools:
13		5.1. Climatic Risk management	farming systems	Resource for the e-learning
		5.1.1.Drought RM	and develop key	curriculum course on
		5.1.2. Flood RM	crop risk	"Agricultural Risk Assessment
		5.2. Biological(Pest) RM	management	and Management for Food
		5.2.1. plant quarantine	strategies	Security in Developing
		5.2.2. Cultural		Countries. Plat form for
		5.2.3. Mechanical		agricultural Risk Management
		5.2.4. Biological		(PARM).pp. 121.
		5.2.5. Use of resistance crop		2. Marco, B., Paolo B., A.
		varieties		Nicholas, E. Birch, Piet, B. and
		5.2.6. Use of pesticides		Silke, D. 2015. Principles of
		5.2.7. Integrated pest		integrated pest management.
		management		Agron. Sustain. Dev. 35:1199–
	1	management		1.51011. 5050011. DOV. 55.1177-

	<ul><li>5.3. Price risk management,</li><li>5.4. Financial risk management</li><li>5.5.Institutional RM and</li><li>5.6. Personal risk management</li></ul>		1215
W14, 15 & 16 6	<ul> <li>Chapter 6: Climate-smart agriculture: supporting tools and policies</li> <li>6.1. Principles that underpin climate smart practices</li> <li>6.2. The role of actors in planning and implementing climate-smart agriculture</li> <li>6.3. Key resources and tools for climate-smart agriculture</li> <li>6.4. Capacity building needs for climate-smart agriculture</li> <li>6.5. Investment, incentives &amp; legal frameworks and instruments</li> </ul>	Visit the nearby farming systems and develop scenario on climate smart agriculture supporting tools and policies	AGRICULTURE Source

#### **Methods of Teaching**

**Case study:** Some research case studies will be presented by students and students will be encouraged to carry out impact assessment mainly on crop production and health. This is essential in order to understand climate change impact on different sectors, on human welfare and derive policy options, Conflict of interest in climate issues and biological issues

#### **Practical exercises**

• Field visits will be conducted to show students efforts made to manage to impacts of climate and biological risks.

#### Course delivery and study load

• The course will be delivered with formal lectures as well as practical exercises, assignments, group discussions, presentations and paper review.

#### **Course assessment**

Evaluation is carried out on continuous assessment base

## Assessment methods and their value

Ouiz	7%
Test	
Field Report	
Mid Exam	
Final exam	50%

Grading: is as per the university regulation

#### **Course Policy**

All students are expected to abide by the code of conduct of students (article 194, 195, 196, 197, 198 and 199, of the Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Since the course does have a number of practical exercises in the laboratory, students are urged to attend every practical session. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

#### References

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- Laurence, C., Gene, G., Steve, I., Doug, J. and Rod, S. 2013. Introduction to Risk Management with understanding of Agricultural risks. Extension Risk Management Education and Risk Management Agency. USDA. pp.44..
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## Approved by:

Name Course Instructor /Tutor

Signature

Name Course chair

Signature

Name Department Head

Signature



## **BAHIR DAR UNIVERSITY**

INSTITUTE	INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES				
Program	Disaster Risk Management & Sustainable Development				
Courses Code	Drms 2041				
Courses Title	GIS & Remote Sensing in DRM				
Course Chair					
Instructor/Tutor					
ECTS Credit (CP)					
Target group	<mark>3ªYear DRMSD Students.</mark>				
Year /semester	Year III Semester I				
Pre-requisites	None				
Status of the course					

#### **Course Description**

This course deals about basic concepts and definition the fundamental principles of GIS and RS. The course also focuses on the components of GIS, GIS data models, Geographic coordinate system, basic data GIS data visualization, basics of remote sensing and image processing.

## **Course Objectives:**

At the end of this course, student will be able to:

- Understand the different components GIS
- Apply GIS data models used GIS analysis,
- Understand the principles of modelling Earth's shape in GIS;
- Able to describe datum, map scale meta data
- Understand the projected coordinate system.
- Able to do simple map production for visualizations;
- Understand the basic principle of Remote Sensing
- Able to basic satellite image processing;

Week	Lecture (hr)	Conceptual focus	Assignment / Task /	Readings
	3	<ul> <li>1. Introduction to GIS</li> <li>Introduction</li> <li>GIS Components</li> <li>GIS in Organizations</li> </ul>	Listening the lecture and taking short notes Asking questions which are not clear in the lecture and answering	Bolstad, P., 2016: GIS fundamentals: a first text on geographic information systems. 5th edition. XanEdu,
2,3	6	<ul> <li>2. GIS Data Models</li> <li>Introduction to GIS Data Models</li> <li>Spatial data models</li> <li>Vector spatial data model</li> <li>Raster Spatial data model</li> <li>Meta data and digital data</li> </ul>	<ul> <li>questions provided by the teacher</li> <li>participate in assignments</li> <li>Lab exercise: <ul> <li>GIS data models</li> <li>Metadata</li> <li>Coordinate systems</li> <li>Map scales</li> <li>GPS reading</li> </ul> </li> <li>Individual and group works assignments</li> </ul>	769 pp. By, R.A. de, Huisman, O., 2009. Principles of geographic information systems: an introductory textbook. The International Institute for Geo- Information Science and Earth Observation (ITC), Enschede.
<b>4,5,</b> 6 <b>7,8 and</b>	9	<ul> <li>3.Coordinate system and map projection</li> <li>Model of Earth's shape</li> <li>Geographic Coordinate system and Datum</li> <li>Projected coordinate system</li> <li>Attribute Data and Tables</li> <li>Map source and scale</li> <li>GPS data collection</li> </ul>	Listening the lecture and taking short notes. Asking questions which are not clear in the lecture and answering questions provided by the teacher. Individual and group works assignments Listening the lecture and taking short notes. Asking questions which are not clear in the lecture and	Janssen, L. L. F., 2004: Principles of remote sensing: an introductory textbook. ITC,.
9		<ul> <li>4.Basic Spatial Analyses</li> <li>Introduction to spatial analysis</li> <li>Selection and classification</li> <li>Dissolving</li> <li>Clipping</li> </ul>	answering questions provided by the teacher. Lab exercise: Individual and group works assignments	

<b></b>				[]
		<ul> <li>Spatial Data Visualization (map production)</li> </ul>		
10,11 and 12	9	<ul> <li>5.Fundamentals of Remote sensing <ul> <li>Basics of Remote Sensing</li> <li>Electromagnetic Radiation</li> <li>Electromagnetic Spectrum</li> <li>Interactions with the Atmosphere</li> <li>Radiation - Interactions with Target</li> </ul> </li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	
		<ul> <li>Passive vs. Active Sensing</li> </ul>		
13,14, and 15	9	<ul> <li>6.Sensors and image analysis</li> <li>Satellite Characteristics</li> <li>Pixel Size, and Scale</li> <li>Spectral Resolution</li> <li>Radiometric Resolution</li> <li>Temporal Resolution</li> <li>Geometric Distortion</li> <li>Weather Satellites</li> <li>Application of Remote sensing</li> </ul>	Listen to a lecture and take notes on the lesson. Lab exercise: True and false color composition and Vegetation indices(NDVI) calculation	Vegetation indices(NDVI)

## LEARNING AND TEACHING MEETHODS

The course delivery system will be using lecture, discussions, questioning and answering, reading assignments, individual and group works.

## ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

Assessment methods and their value

Test	8%
Quiz	7%
Assignment	10%
Mid Exam	
Final exam	50%
	2070

Grading: is as per the university regulation

All students are expected to abide by the code of conduct of students (Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

## REFERENCES

1. Bolstad, P., 2016: GIS fundamentals: a first text on geographic information systems. 5th edition. XanEdu, 769 pp.

2. By, R.A. de, Huisman, O., 2009. Principles of geographic information systems: an introductory textbook. The International Institute for Geo-Information Science and Earth Observation (ITC), Enschede.

3. Janssen, L. L. F., 2004: Principles of remote sensing: an introductory textbook. ITC,. **Approved by:** 

Name Course Instructor /Tutor

Signature

Name Course chair

Signature

Name Department Head Signature



#### BAHIR DAR UNIVERSITY

# INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

BSC. I	n Disaster Ri	isk Management a	nd S	Sustainable Devel	lopmen	t	
Department	Disaster Risk Management and Sustainable Development						
Courses code	Drms30	74					
Courses Title	Research	methods and tools	s in 1	Disaster Risk Ma	nagem	ent	
Degree Program	BSC. In D	Disaster Risk Mana	agen	nent and Sustaina	able De	velopment	
Module name	Researc	h Methods and	То	ols in DRM			
Module number	07						
Course chair	Dr. Tesfa	hun Asmamaw					
Instructor/Tutor							
CP credit (CP)	6						
Contact hours per week	Lectures	Tutorials seminars	&	Laboratory practical	&	Home Study	Total
	32	-		16		144	192
Lecture days, hours & room	2	·					
Tutorial /lab days & hour	3						
Target group	3 <sup>rd</sup> Year	Disaster Risk Ma	nage	ement and Sustain	nable D	Developmen	t
Year /semester	Year /semester 3 <sup>rd</sup> Year, 1 <sup>st</sup> Semester						
Pre-requisites	None						
Status of the course	Major						

## **Course Description**

The main purpose of the course will be to define the basic concepts of research, misconception of research methodology and methods. History of research in disaster management; types of research in relation to disaster management, ontology and epistemology; Research approaches; qualitative research methods (design, collection, analysis and report writing of qualitative data and tools used for qualitative data).Quantitative research methods (design, collection, analysis, report writing and tools used for quantitative data). Participatory research methods (types, their use limitation and strengths, and how they could compliment conventional research methods); Steps and components of surveys, data encoding, data analysis and reporting of results; the use of non- parametric statistics in social science.

Research proposal and report writing format for different types of research will be discussed. Risk identification methods such as brainstorming, flowchart, SWOT analysis; Risk assessment (qualitative such as scale of analysis, mapping, matrix approach, risk indicator based approach and quantitative), risk analysis and Risk treatment methods .will be discussed

# **Course Objectives:**

At the end of the course students should be able to:

- Define key terminologies and basic concepts of research methods in DRM
- Explain the historical development of DRM and importance of research
- Describe various research methodology in DRM
- Define research problem and design research proposal
- Describe techniques to data processing, analysis and interpretation and scientific paper writing

Week	Lectur	CONCEPTUAL FOCUS	Activity	READINGS
S	e (hrs)			
W1 &2		<ul> <li>Chapter 1: Definition and basic concepts of research methods and tools</li> <li>1.1 Key Terminology meaning and objectives of research methods</li> <li>1.2 Mis conceptions of research methodologies and methods</li> <li>1.3 Types of researches and Research approaches</li> <li>1.4 Historical development of DRM Research</li> <li>1.5 Importance of DRM Research</li> <li>1.6 Types of data and data sources</li> <li>1.7 Criteria for good research</li> </ul>	Practice to collect data from different sources	<ol> <li>University of Leicester. 2001. Research Methods in the Study of Risk, Crisis and Disaster Risk Management, Course Module 1-3- 9.42.</li> </ol>
W3,4, 5 and 6		<ul> <li>Chapter 2: Defining Research problem and writing proposal</li> <li>2.1. Defining Research Problem <ul> <li>2.1.1. What is a research problem</li> <li>2.1.2. Need of defining the research problem</li> <li>2.1.3. Selecting the research Problem</li> <li>2.1.4. Techniques involved in defining the research problem</li> </ul> </li> <li>2.2. Research proposal writing <ul> <li>2.2.1. Steps of writing a research proposal</li> <li>2.2.2. choosing a research topic</li> <li>2.2.3. Setting objectives of the research proposal</li> <li>2.2.4. choosing methods of the research</li> <li>2.2.5. Planning of research and time tables</li> </ul> </li> </ul>	Practice Research problem defining and prioritizatio n Research designing and proposal writing Practice review paper writing	<ol> <li>University of Leicester. 2001. Research Methods in the Study of Risk, Crisis and Disaster Risk Management, Course Module 1-3- 9.42.</li> <li>Ana-Maria DINU . 2012. Modern Methods of Risk Identification in Risk Management. International Journal of Academic Research in Economics and Management Sciences. 1:6: 67 – 71.</li> </ol>
W7 & 8		Chapter 3: Research Design 3.1. Meaning of research design	Practice different types of	1.University of Leicester. 2001. Research Methods in

	<b>3.2.</b> Need for research design	research	the Study of Risk,
	3.3. Features of a good research design	designing	Crisis and Disaster
	3.4. Types of research design		Risk Management, Course Module 1-3-
	3.5. Sampling procedures and sample size		9.42.
	determination		9.42.
W9&	Chapter 4: Qualitative Research Methods	Qualitative	1.University of
10	and tools	data	Leicester. 2001.
	4.1. Methods of qualitative data collection	collection	Research Methods in
	2.2.1.Key informant interview	using	the Study of Risk,
	2.2.2. Focus group discussion	various	Crisis and Disaster
	2.2.2. Personal observations	methods and	Risk Management,
			Course Module 1-3-
	4.2. PRA tools	tools	9.42.
	4.3.1. Resource mapping		2. Babbie, E.1973.
	4.3.2. Wealth ranking		Survey Research Methods, California:
	4.3.3. Ranking and scoring		Wadsworth Publishing
	4.3.4.Trend /time analysis		Belmont.
	4.3.5. Venn diagraming		3. Kotharc, C.R. 2001.
			Research Methodology:
			Methods and Techniques,
			Wishwa Parak. Shan. New
XX 74 4			Delhi, India 2 <sup>nd</sup> pp. 468
W11	Chapter 5: Quantitative research methods	Quantitative	1. University of
and 12	and tools	data	Leicester. 2001. Research Methods in
		collection	the Study of Risk,
	5.1. Overview of quantitative research methods and	using	Crisis and Disaster
	tools	various	Risk Management,
	5.2.Types of quantitative research methods	methods and	Course Module 1-3-
	5.3. Methods of quantitative data collection	tools	9.42.
	5.3.1. Interviewing		2. Babbie, E.1973.
	5.3.2. Probability distributions		Survey Research
	5.4. Tools and techniques used for Quantitative data		Methods, California:
	collection and analysis		Wadsworth Publishing
	5.4.1. Quantitative risk analysis & modeling		Belmont.
	techniques		Demiont.
			Kotharc, C.R. 2001.
	5.4.2. Sensitivity analysis		Research Methodology:
	5.4.3. Modeling & simulation		Methods and
	<ul><li>5.4.4. Cost Risk analysis</li><li>5.4.5. Schedule risk analysis</li></ul>		Techniques, Wishwa
	5.4.6. Risk Audits		Parak. Shan. New
	5.4.7. Variance and trend analysis		Delhi, India $2^{nd}$ pp. 468.
	5.4.8. Reserve analysis and others		2011, 11010 2 pp. 700.
	5.1.0. Reserve anarysis and outers		3. Kotharc, C.R. 2001.
			Research
			Methodology:
			Methods &
			a a a a a a a a a a a a a a a a a a a

			Techniques, Wishwa Parak. Shan. New Delhi, India 2 <sup>nd</sup> pp. 468
W13 and 14	Chapter Six: DRM Data Processing and Analysis         6.1. Processing operations (editing, coding, classification, tabulation)         6.2. Elements/ types of data/ analysis         6.3. Basic principles for analysis of qualitative data         6.4. Statistical test (descriptive statistics, and inferential statistics)	Practice data processing and analysis	<ol> <li>University of Leicester. 2001. Research Methods in the Study of Risk, Crisis and Disaster Risk Management, Course Module 1-3- 9.42.</li> <li>Babbie, E.1973. Survey Research Methods, California: Wadsworth Publishing Belmont.</li> </ol>
W15	Chapter 7: Interpretation and Report Writing	Practice	1. University of
and 16	and Scientific paper writing skill	analyzed	Leicester. 2001.
	<ul> <li>and format</li> <li>7.1. Research proposal writing skill and format</li> <li>7.2. Report and scientific paper writing skills and format</li> <li>7.3. Literature Review methods</li> <li>7.4. Types of publication</li> </ul>	scientific paper writing using different types of	<ul> <li>Research Methods in the Study of Risk, Crisis and Disaster Risk Management, Course Module 1-3- 9.42.</li> <li>Robert A. 1996. How to Write and Publish a Scientific Paper, 4<sup>th</sup> ed., Cambridge: Cambridge University Press, UK, PP.223.</li> </ul>
		writing styles	

## Methods of Teaching

**Case study:** Some research case studies will be presented by students and students will be encouraged to identify problem, develop research proposal, DRM data processes and analysis and write scientific paper in various DRM findings. This is essential in order to understand disaster impact on different sectors, on human welfare and derive policy options, Conflict of interest in DRM issues

## **Practical exercises**

• Field visits will be conducted to show students efforts made to adapt to impacts of DRM.

#### Course delivery and study load

• The course will be delivered with formal lectures as well as practical exercises, assignments, group discussions, presentations and paper review.

#### **Course assessment**

#### ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

#### Assessment methods and their value

Quiz	7%
Test	
Assignment	- , -
Mid Exam	
Final exam	
	5070

Grading: is as per the university regulation

## **Course Policy**

All students are expected to abide by the code of conduct of students (article 194, 195, 196, 197, 198 and 199, of the Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Since the course does have a number of practical exercises in the laboratory, students are urged to attend every practical session. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

## **References**

- Ana-Maria DINU . 2012. Modern Methods of Risk Identification in Risk Management. International Journal of Academic Research in Economics and Management Sciences. 1:6: 67 71.
- Babbie, E.1973. Survey Research Methods, California: Wadsworth Publishing Belmont.
- Fhi. 2005. Qualitative Research Methods: A Data Collector's Field Guide . North Carolina. USA. PP. 137.
- Kotharc, C.R. 2001. Research Methodology: Methods and Techniques, Wishwa Parak. Shan. New Delhi, India 2<sup>nd</sup> pp. 468.
- Robert A. 1996. How to Write and Publish a Scientific Paper, 4<sup>th</sup> ed., Cambridge: Cambridge University Press, UK, PP.223.
- University of Leicester. 2001. Research Methods in the Study of Risk, Crisis and Disaster Risk Management, Course Module 1-3-9.42.

## **Approved by:**

Name Course Instructor /Tutor

Name Course chair

Name Department Head

Signature

Signature

Signature



# **BAHIR DAR UNIVERSITY**

# COLLEGE OF AGRICULTURE AND ENVIRONMENTAL SCIENCES

Program	Disaster R	Risk Managemen	t and Sustainable D	evelopmer	nt	
Courses code	Drms3051					
Courses Title	Sustainab	le Development				
Degree Program	BSc. in Disaster Risk Management and Sustainal					
	Developm	ent				
Module name	Disaster &	<b>b</b> Development				
Module number	M05					
Course chair						
Instructor/Tutor						
ECTS credit (CP)	5					
Contact hours per week	Lectures	Tutorials &	Laboratory &	Home	Total	
		seminars	workshop	Study		
	48	-	-	60	108	
Lecture days, hours &	-					
room						
Tutorial /lab days & hour						
Target group	3 <sup>rd</sup> Year	Disaster Ris	k Management a	and Sust	tainable	
	Developm	ent Students				
Year /semester	3 <sup>rd</sup> 1 <sup>st</sup> S	emester				
Pre-requisites	None					
Status of the course	Major					

## **Course Description:**

The course "sustainable development" is prepared for undergraduate students in the department of disaster risk management and sustainable development. The overall purpose of delivering the course is to familiarize students with basic concepts and principles of sustainable development. Debates/arguments will be presented. The course comprises chapters including–Introduction to the concept of Sustainable Development, environment and development, sectoral linkages in environment and development, assessing the sustainability of development, and instruments and strategies/mechanisms for sustainable development. The teaching method will range from lecture to arguing on debatable issues. In addition to the class work, field works/observations are believed to be essential to deliver the course in a complete manner.

## **Objectives:**

After the end of the course, among others students are expected to:

- Explain basic concepts in sustainable development from different dimensions,
- Describe the components of sustainable development,
- Argue against various development theories,
- Explain the link between population growth, poverty, environment and sustainable development,
- Appreciate opportunities and challenges of sustainable development,
- Appreciate the relationship between disasters and sustainable development, and
- Contextualize various principles of development to various environmental setting.

## Contents

## 1. Introduction to the concept of Sustainable Development

- 1. Definition of development, sustainability and sustainable development;
- 2. Evolution of sustainable development;
- 3. Dimensions of sustainable development;
- 4. Goals and core values of development and SDGs; and

## 2. Concerns in sustainable development

- 1. Population growth and sustainable development ;
- 2. Poverty and sustainable development ;
- 3. Inequality and sustainable development;
- 4. Biodiversity and sustainable development ; and
- 5. The link between disaster and sustainable development.

## 3. Sectorial linkages for sustainable development

- 1. Urban-rural linkage: Agriculture-Manufacturing industry linkage, Core and periphery linkage;
- 2. Private and government sectors linkage;
- 3. Education sector, land use and administration, environment, water resources and energy, information sector; and
- 4. Developed versus developing economies linkage.

## 4. Assessing the sustainability of development: Metrics

- 1. Environmental Performance indicators;
- 2. Indicators of sustainable development;
- 3. Life cycle analysis, sustainability indices and rating systems;
- 4. Carbon, water and ecological foot printing metrics; and
- 5. Greenhouse gases inventory metrics.

## 5. Instruments and strategies/mechanisms for sustainable development

- 1. Stakeholder analysis for sustainable development;
- 2. Environmental Management Systems;
- 3. Educational, institutional, legal, market, standards, certification, and other local to global levels.

## **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (100%) which comprises relevant tests, assignments/ project works, quizzes, mid and final exam.

Activities	Marks
Quiz 1	7%
Test 1	8%
Assignment and presentation	10%
Mid Exam	25%
Final Exam	50%
Total	100%

## SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

#### **COURSE POLICY**

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**Note on class attendance and participation:** You are expected to attend class regularly. I will take attendance on random days during the semester to ensure that students are coming to class, and if you miss class repeatedly, your grade will be affected. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. I will not allow you enter if you are late more than five minutes. I will often ask questions during my lectures and active participation in class is essential.

**Cell phones:** Cell phones must be turned off before entering the class as they are disruptive and annoying to all of us in the class. So, please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources (where I provided you to read) may be the subject of assignment or final exam question items. Please follow the instructions indicated at each content of your course guidebook o complete all the assignments provided whether they are to be performed individually or in group.

## **Teaching tools**

Handouts on the topics covered in the course, lecture slides, assignments and exercises and their draft solutions in R (The R Project [http://www.r-project.org/] for Statistical Computing).

## References

- Hecht, A. D. (1999). The triad of sustainable development: Promoting sustainable development in developing countries. *The Journal of Environment & Development*, 8(2), 111-132.
- Laedre, O., Haavaldsen, T., Bohne, R. A., Kallaos, J., & Lohne, J. (2015). Determining sustainability impact assessment indicators. *Impact Assessment and Project Appraisal*, 33(2), 98-107.
- 3. Rainey, David Lloyd (2008): Sustainable Business Development: Inventing the Future through Strategy, Innovation and Leadership, Cambridge (Cambridge Univ. Press).
- Strange, Tracey / Bayley, Anne (2008). Sustainable Development. Linking Economy, Society, Environment, OECD Insights, Paris.
- 5. Todaro, Michael P. / Smith, Stephen C. (2011). Economic Development, 11th ed., Boston

(Addison-Wesley).

- 6. Rapley, J. (2013). Understanding development: Theory and practice in the third world. Routledge.
- 7. Borowy, I. (2013). *Defining sustainable development for our common future: A history of the World Commission on Environment and Development (Brundtland Commission)*. Routledge.

Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Department Head

Signature

Signature

Signature



## Bahir Dar University Institute of Disaster Risk Management and Food Security Studies Disaster Risk Management and Sustainable Development Program

Disaster Risk Management and Sustainable Development Program					
<b>Course Title</b>		Drought	and Flood Risk N	<b>Management</b>	
<b>Course Code</b>	Drms3019				
BSc Program	Disaster Ris	Disaster Risk Management and Sustainable Development			
Module Name	Disaster risk	k management	Ι		
Module Code	Drms01				
Course Chair					
	Office locat	ion:			
	Mobile: ; e-	mail:			
	Consultation	n Hours:			
Instructor					
	Office locat	ion: Bahir Dai	ſ		
	Mobile:; e-r	nail:			
	Consultation	n Hours:			
<b>ECTS Credits</b>	6				
( <b>CP</b> )					
Contact Hours	Lecture	Tutorial	Lab/Practical	Home Study	Total
(per week)	48				
Lecture days,					
Hours & Room:					
Tutorial/Lab					
days & Hours					
<b>Target Group:</b>		In Disaster Risk Management and Sustainable Development first			
	year student	S			
Year /Semester					
Pre-requisites					
Status of the					
course					

## **Course description**

This course explores definition and concepts of drought and flood; the causes and impacts of drought and flood; the different characteristics of drought and flood as a hazard; underlying vulnerability factors to the impacts of drought and flood hazards as well as assessment of drought and flood risks; drought and flood management strategies; challenges and opportunities of drought and flood management in Ethiopia.

Course Objectives: At the end of his course students will be able to:

- Define the different types of drought & floods
- Identify the causes and factors affecting the severity of drought & floods
- Explain the different characteristics of drought & floods
- Understand vulnerability and impacts of drought & floods
- Apply drought and flood assessment tools
- Understand the different drought & flood management strategies
- Identify the challenges and opportunities of drought & flood management in Ethiopia

		Conceptual focus	Assignment / Task /	Reading
Week	Lecture (hr)	_		_
semester	3	<ul> <li>Chapter 1: Understanding &amp; Defining Drought</li> <li>Definition of drought</li> <li>Concept of drought</li> <li>Concept of drought</li> <li>Concept of drought</li> <li>Concept of drought</li> <li>Meteorological drought</li> <li>Agricultural drought</li> <li>Hydrological drought</li> <li>Socioeconomic drought</li> <li>Physiological drought</li> <li>Causes of drought</li> <li>Factors affecting the severity of drought</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Country Report on the state of Drought Early Warning Systems in Ethiopia, National Disaster
		<ul> <li>chapter 2: Characteristics of Drought</li> <li>Introduction</li> <li>Intensity of drought Frequency of drought Spatial coverage of drought</li> <li>Drought index</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Edwards, D.C.; and T. B. McKee. 1997. Characteristics of 20th century drought in the United States at multiple time scales. Climatology Report Number 97–2, Colorado State University, Fort Collins, Colorado.

## Tentative schedule for the course

<ul> <li>chapter 3: Impacts &amp; Assessment of Drought risks</li> <li>Potential impacts of drought <ul> <li>Economic impacts</li> <li>Environmental impacts</li> <li>Social impacts</li> </ul> </li> <li>Drought risk assessment <ul> <li>Hazard ranking exercise</li> <li>Vulnerability and capacity assessment</li> <li>Risk matrix</li> </ul> </li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Drought in Ethiopia, UNICEF Report on Ethiopia, 2003 Edwards, D.C.; and T. B. McKee. 1997. Characteristics of 20th century drought in the United States at multiple time scales. Climatology Report Number 97–2, Colorado State University, Fort Collins, Colorado.
<ul> <li>chapter 4: Drought Management Strategies</li> <li>♦ Pre-drought disaster risk management</li> <li>○ Drought mitigation &amp; preparedness</li> <li>○ Drought monitoring &amp; early warning</li> <li>○ Drought response</li> <li>● Post-drought disaster risk management</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Wilhite, Donald A. etal. "Planning forDrought: Movingfrom Crisis to RiskManagement."Journal of AmericanWater ResourcesAssociation 36(2000):697–710Schanze, J., Zeman,E., Marsalek, J. 2004.Flood RiskManagement:Hazards,Vulnerability, andMitigation
<ul> <li>chapter 5: Challenges of Drought management</li> <li>◆ Challenges of Drought management</li> <li>○ Conceptual problems</li> <li>○ Institutional challenges</li> <li>○ Climate change</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Schanze, J., Zeman, E., Marsalek, J. 2004. Flood Risk

	<b>T ' ' ' ' ' ' '</b>	
chapter 6: Drought monitoring		
and warning	take notes on the	E., Marsalek, J. 2004.
• Indexes and models,	lesson, Forward all	Flood Risk
• evaluation of meteorological	the confusion or	Management:
droughts,	doubts trainee may	Hazards,
Evaluation of hydrological	have in relation to the	Vulnerability, and
droughts.	given lecture, take	Mitigation
	part in discussions	Country Report on the
		state of Drought Early
		Warning Systems in
		Ethiopia, National
		Disaster
chapter 7: Acquisition and		
processing of hydro-		
meteorological data to support		
flood and drought modeling:		
♦ rainfall fields estimates and		
stream flow measurements,		
♦ open databases,		
• Data analysis and validation.		
• Remote sensing of water-		
related variables.		

## Learning and Teaching Methods

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works

- Lecture
- Reflections: Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.
- Home work: Assignments will be given to help reinforce some topics covered or not covered in class

## ASSESSMENT METHODS

Evaluation will be carried out based on continuous assessment (100%) which comprises relevant tests, assignments/ project works, quizzes, mid and final exam.

Activities	Marks
Quiz 1	7%
Test 1	8%
Assignment and presentation	10%
Mid Exam	25%
Final Exam	50%
Total	100%

## SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

## **COURSE POLICY**

All students are expected to abide by the code of conduct of (article 194 of The Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I will give out the directions, if I find necessary, for the assignments one week prior to their due date.

**Note on class attendance and participation:** You are expected to attend class regularly. I will take attendance on random days during the semester to ensure that students are coming to class, and if you miss class repeatedly, your grade will be affected. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. I will not allow you enter if you are late more than five minutes. I will often ask questions during my lectures and active participation in class is essential.

**Cell phones:** Cell phones must be turned off before entering the class as they are disruptive and annoying to all of us in the class. So, please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources (where I provided you to read) may be the subject of assignment or final exam question items. Please follow the instructions indicated at each content of your course guidebook o complete all the assignments provided whether they are to be performed individually or in group.

## **Teaching tools**

Handouts on the topics covered in the course, lecture slides, assignments and exercises and their draft solutions in R (The R Project [http://www.r-project.org/] for Statistical Computing).

## Reference

- 1. Schanze, J., Zeman, E., Marsalek, J. 2004. *Flood Risk Management: Hazards, Vulnerability, and Mitigation Measures.* Springer. Ostrov; Czech Republic.
- 2. Country Report on the state of Drought Early Warning Systems in Ethiopia, National Disaster
- 3. Drought in Ethiopia, UNICEF Report on Ethiopia, 2003
- 4. Edwards, D.C.; and T. B. McKee. 1997. *Characteristics of 20th century drought in the United States at multiple time scales*. Climatology Report Number 97–2, Colorado State University, Fort Collins, Colorado.
- 5. Wilhite, Donald A. et al. "Planning for Drought: Moving from Crisis to Risk Management." *Journal of American Water Resources Association* 36 (2000):697–710.
- 6. In particular, additional reading material includes:
- 7. -WMO (2008): Guide to Hydrological Practices. WMO No. 168. World Meteorological Organization, Geneva.
- 8. WMO(2008): Manual on Low-flow Estimation and Prediction, WMO No, 1029. World Meteorological Organization, Geneva.
- 9. WMO (2011): Manual on flood forecasting and warning, WMO No. 1072. World Meteorological Organization, Geneva.

-Grimaldi, S., S.C. Kao, A. Castellarin, S.M. Papalexiou, A. Viglione, F. Laio, H. Aksoy, A. Gedikli (2011): Statistical Hydrology. In Treatise on Water Science. (479 – 517). ISBN: 978-0-444-53199-5. OXFORD: Elsevier (UK).

Approved

Name Instructor/Tutor

Name Course Chair

Name Department Head Signature

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INSTITUTE OF DISASTE	ER RISK MAN	AGEMENT AN	D FOOD SECURI	TY STUD	IES
Program	Disaster R	isk Management	& Sustainable Dev	velopment	,
Courses code	Drms3054				
Courses Title	Disaster R	isk and Insuranc	e		
Degree Program	BSc. Disas	ter Risk Manager	ment & Sustainabl	e Develop	ment
Module name	Disaster R	isk Management	and Development		
Module number	05				
Course Chair					
Instructor/Tutor					
ECTS credit (CP)	4				
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total
	32	-	-	60	108
Lecture days, hours & room					
Tutorial /lab days & hour					
Target group					
Year /semester	3 <sup>rd</sup> year 2 <sup>r</sup>	<sup>nd</sup> semester			
Pre-requisites	None				
Status of the course	Major	Major			

# **COURSE DESCRIPTION**

Everyone is living with risk. Risk can be managed by a variety of approaches. For this course purpose, risk management consists *risk avoidance, risk reduction, risk acceptance and risk transfer*. Risk transfer

involves transferring the weight or the consequence of a risk on to some other party. There are many ways that risk transfer can take place. Insurance is a commonly used method of risk transfer; the insurance company accepts the risk of another. Insurance is an agreement where, for a stipulated payment called the premium, one party (the insurer) agrees to pay to the other (the policyholder or his designated beneficiary) a defined amount (the claim payment or benefit) upon the occurrence of a specific loss. This course covers how individuals and business organizations manage risk via insurance the process. Students will be prepared to function in a business environment, developing an awareness of the challenges, the tools, and the process of designing and implementing a risk management program with respect to risk transfer and insurance.

## **Course Objectives**

The course is designed to provide students general principles of risk management particularly the ways in which businesses and society assess, control, and transfer risk.

Upon completion of this course, the student will be able to:

- understand various disaster risk management concepts, tools, techniques and practices,
- understand general principles of risk management particularly the ways in which businesses and society assess, control, and transfer risk,
- Identify alternative risk management techniques and understand the insurance industry and its beneficiaries.
- explain insurance risk management and describe the insurance business and its operations
- understand and explore the contractual aspects of insurance policies and attempt to understand how claims come into existence and are managed,
- Describe the meaning of insurance, policy forms, declarations and coverage extensions.
- become familiar with a number of concepts, programs and insurance policies found in personal and business application
- engage and prepare to function in a business environment by developing an awareness of the challenges, the tools, and the process of designing and implementing a risk management program with respect to risk transfer and insurance.

# TENTATIVE SCHEDULE OF LECTURE TOPICS AND READINGS

Week	Lecture hour	CONCEPTUAL FOCUS	Essential READINGS
Week o &two	ne 3	<ul> <li>Chapter 1: Introduction to Disaster Risk Management</li> <li>Concepts and definitions of risk (hazard, vulnerability, risk, disaster risk</li> <li>Identification and classification of risk</li> <li>The probabilistic nature of risk - risk in statistics</li> </ul>	
Week thr and four	ee 3	<ul> <li>Techniques and steps in disaster risk management (processes and practices of disaster risk mitigation plans):</li> <li>Risk avoidance (risk reduction, risk prevention)         <ul> <li>✓ Risk sharing</li> <li>✓ Risk transfer</li> </ul> </li> </ul>	Handout compiled by the
Week fiv six a seven	e, 3 id	<ul> <li>Unit 2: Introduction to Risk Insurance: Role of insurance in risk management</li> <li>Concepts and definitions of insurance</li> <li>Historical development of insurance</li> <li>Early methods <ul> <li>Modern Insurance</li> </ul> </li> <li>Risk Management and Insurance Operations</li> <li>statistical interpretations of risk insurance</li> <li>Legal principles of risk transfer and government regulation of insurance,</li> <li>Types of insurance</li> <li>Vehicle/accident insurance</li> <li>Life insurance</li> <li>Health insurance</li> <li>Property insurance</li> <li>Fire insurance</li> </ul>	instructor
Week eigh nine ,ten an eleven		<ul> <li>Unit 3: Disaster Risk Reduction and Management in Agriculture</li> <li>Characterize the agricultural sector,</li> <li>Vulnerabilities of the agricultural sector,</li> </ul>	

		<ul> <li>Agricultural risk         <ul> <li>✓ Sources of risk</li> <li>✓ Production risk</li> <li>✓ Market/price risk</li> </ul> </li> <li>Agricultural risk in the changing climate,</li> <li>Mainstreaming DRR and CCA within agriculture sector,</li> <li>The Importance of DRR in Agriculture</li> <li>Policies strategies related to disaster risk reduction and management in agriculture,</li> <li>Types of strategies to disaster risk reduction and management in agriculture</li> <li>✓ Risk mitigation</li> <li>✓ Risk transfer</li> <li>✓ Risk coping</li> </ul>	Handout compiled by the instructor
		<ul> <li>✓ Risk coping</li> <li>✓ Adaptive capacity</li> </ul>	
Week twelve-	3	Unit 4: Agricultural Risk Insurance in Ethiopia	
sixteen		<ul> <li>✓ crop insurance</li> <li>✓ weather risk insurance</li> <li>✓ Livestock risk insurance</li> <li>✓ price insurance</li> </ul>	

## LEARNING AND TEACHING MEETHODS

The course delivery system will be using lecture, discussions, questioning and answering, reading assignments, individual and group works.

ASSESSMENT OF LEARNING

Evaluation is carried out on continuous assessment base

Assessment methods and their value

Test	8%
Ouiz	
Assignment	10%
Mid Exam	
Final exam	50%

Grading: is as per the university regulation

## **Course Policy**

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## References

Agricultural insurance http://www.fao.org/ag/ags/agricultural-finance-and-investment/agricultural-insurance/en/

Climate risk assessment and management in agriculture, Ramasamy Selvaraju, Climate, Energy and

Tenure Division, FAO, Rome, www.fao.org/3/a-i3084e/i3084e06.pdf

FAO. 2005. Insurance of crops in developing countries. FAO Agricultural Services Bulletin 159. Rome. http://www.fao.org/ag/ags/agsdivision/publications/publication/en/c/38655/

Integrating Disaster Risk Management into Climate Change Adaptation: http://www.adpc.net/2012/?

Risk Management as a Pillar in Agriculture and Food Security Policies: India case study

Policy Brief, Kolli N. RAO Risk Management Policy Consultant, July 2008

Principles of Risk Management and Insurance – 12th edition Rejda McNamara, http://www.amazon.com/Principles-Management-Insurance-Edition Pearson/dp/0132992914

Risk Mitigation training for Smallholder Agricultural Production in the Caribbean

https://agrisktraining.org/

Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Department Head Signature



BAHIR DAR UNIVERSITY							
INSTITUTE OF DI	SASTER RI	SK MANAGI	EMEN	T AND FOOD S	ECUR	ITY STUD	IES
Program	Disaster I	Risk Managen	nent ar	nd Sustainable D	evelopi	ment	
Courses code	Drms 304	4					
Courses Title	Urban Ri	sk Manageme	nt				
Degree Program	BSc. in Disaster Risk Management and Sustainable Development						
Module name	Disaster Risk Management II						
Module number	04						
Course chair							
Instructor/Tutor							
ECTS credit (CP)	5						
Contact hours	Lectures	Tutorials	&	Laboratory	&	Home	Total
		seminars		workshop		Study	
	<b>48</b>	-		-		55	103
Lecture days, hours &	-						

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room	
Tutorial /lab days &	
hour	
Target group	3 <sup>rd</sup> year Disaster Risk Management and Sustainable Development
	Students
Year /semester	3 <sup>rd</sup> Year, 2 <sup>nd</sup> Semester
Pre-requisites	None
Status of the course	Major

#### **Course Description**

The main purpose of this course is to introduce students the relationship between disaster risk and urbanization; the characteristics of urban disaster risks; and the factors that make urban areas vulnerable to different hazardevents. It also aims to aware students about the design and implementation of urban risk reduction programs.

#### Objectives

Up on the successful completion of this course the students will be able to;

- Describe disaster risk context of urban areas
- Explain relation between urbanization and disaster risks
- Identify various urban hazards and risk reduction measures
- Explain special characteristics that make urban areas vulnerable to different hazards
- Describe compounding natures of disasters in urban areas

Week	Lecture(hrs)	CONTENT CONTENT OF CONTENTS	Activities/tasks	Readings
W1-3	9	<ul> <li>Chapter1.Introduction to Urban risk</li> <li>Concepts of urbanization</li> <li>Causes and impacts of urbanization</li> <li>Tracing the roots of</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	Urban risk management module prepared by DRMSD program PELLING, Mark and Wisner, Ben (2008)
W4-6	9	<ul> <li>Tracing the foots of Urban risk</li> <li>Chapter2. Urban Morphology</li> <li>Urban forms and patterns</li> <li>City structure</li> <li>Population and city land use</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	Urban risk management module prepared by DRMSD program PauleitA. Coly, et al. 2015
W7- 10	12	<ul> <li>Chapter3. Hazards in urban environment <ul> <li>Urban floods</li> <li>Environmental pollution</li> <li>Urban fire</li> <li>Traffic Accident</li> <li>Chemical hazards</li> <li>Social Hazards</li> <li>Geo-hazards</li> </ul> </li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation Discuss on selected Case Studies	Urban risk management module prepared by DRMSD program PELLING, Mark and Wisner, Ben (2008)
W11- 13	9	<ul> <li>Chapter4.Vulnerabilities in Urban Areas</li> <li>Population distribution</li> <li>Urban slums</li> <li>Housing structure</li> <li>Building codes and bylaws</li> <li>Emergency services</li> <li>Hydrology and drainage systems</li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation Discuss on selected Case Studies	Urban risk management module prepared by DRMSD program PELLING, Mark and Wisner, Ben (2008)
W14- 16	9	<ul> <li>Chapter5. Urban Risk Reduction <ul> <li>Urban Risk and Urban Authorities</li> <li>Urban Risk Reduction Strategies</li> <li>Urban Disaster Risk Management Plan</li> </ul> </li> </ul>	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation Field visit to relevant bureaus	Urban risk management module prepared by DRMSD program Field Study of any city • Visit to various urban authorities • Visit to Fire Brigade, Rescue, EPA

# SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READINGS

## **INSTRUCTIONAL METHODS**

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation, and field work.

#### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (100%) which comprises relevant tests, assignments/ project works, quizzes, mid and final exam.

SUMMARY	OF ASSIGNMENTS.	TESTS, C	UIZES AND EXAM
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Activities	Marks
Quiz 1	7%
Test 1	8%
Assignment and presentation	10%
Mid Exam	25%
Final Exam	50%
Total	100%

Note: Grading: As per University's regulation

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### References

- FERGUSON, Ronald F. and Dickens, William T. (1999) Urban Problems and Community Development. Brookings Institution Press.
- RAHMAN, A., Khan, A. N., Shaw R. (2016). Disaster Risk Reduction Approaches in Pakistan. SPRINGER Verlag, Tokyo, JAPAN.
- Shaw, R., Rahman, A., Surjan, A., &Parvin, G. A. (2016). Urban Disasters and Resilience in Asia. Elsevier Inc. New York.
- KHAN, A. N. (2009) Integrating Disaster Management and Climate Change Adaptation into Policy Making. Proceedings of the International Disaster Management Conference -2009, Baragali Summer Campus, University of Peshawar, Khyber Pakhtunkhwa, Pakistan
- PELLING, Mark and Wisner, Ben (2008) Disaster Risk Reduction: Cases from Urban Africa. Earthscan Publications Ltd., London, UK.
- PUGH, Cedric (1996) Sustainability the Environment and Urbanisation. Earthscan, London, Uk
- SHAW, Rajib; Srinivas, Hari; and Sharma, Anshu (2009) Urban Risk Reduction: An Asian Perspective. Community, Environment and Disaster Risk, Emerald Group Publishing Limited. KHAN, Amir Nawaz (2016) Introduction to Hazards and Disasters. Al-Azhar Environmental Planning and Management Centre, Peshawar
- Pauleit · A. Coly · S. Fohlmeister P. Gasparini · G. Jørgensen · S. Kabisch W. J. Kombe · S. Lindley I. Simonis · K. Yeshitela*Editors*. Urban Vulnerability and Climate Change in Africa: A Multi-disciplinary Approach. Springer Cham Heidelberg New York Dordrecht London. © Springer International Publishing Switzerland 2015

### Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Department head

Signature

Signature

Signature



### BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

Program	Disaster Risk Management and Sustainable Development					
Courses code	Drms3062					
Courses Title	Health and Nutrition					
Degree Program	BSc. in Disaster Risk Management and Sustainable Development					
Module number	06					
Course chair	Yosef Tamiru					
Instructor/Tutor	Yosef Tamiru					
ECTS credit (CP)	5					
Contact hours per	Lectures Tutorials & Laboratory & Home Total					
term	seminars workshop Study					
	<mark>- 48 - 114</mark>	<mark>162</mark>				
Lecture days,	-					
hours & room						
Tutorial /lab days						
& hour						
Target group	4 <sup>th</sup> Year DRMSD Students					
Year /semester	4 <sup>th</sup> Year Semester I					
Pre-requisites	-					
Status of the	Major					
course						

### **Course Description**

This course deals about definition of health and nutrition. The course also focuses on the major nutritional problems related with different disasters and the methods used for identifying these major nutritional problems. The prevailing policies for food and nutrition security, as well as principles, codes and standards that underpin humanitarian assistance will be introduced and their relevance to nutrition will be reviewed.

#### **Course Objectives:**

At the end of this course, student will be able to:

- Define Health and nutrition
- Discuss the major nutritional problems of public health significance in Ethiopia
- Develop skill on assessment of nutritional status,

- Identify the available interventions against nutritional problems
- Identify the types and application of different types of feeding programs,
- Describe the food and nutrition problems in emergencies

## SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READINGS

Wee	Lect	Contents	Assignment / Task /	Readings
k	ure			
	(hr)			
1,2,3	8	<ol> <li>Introduction</li> <li>1.1 Concept of health</li> <li>1.2 Different perspectives on Health</li> <li>1.3 Determinants of Health</li> <li>1.4 Definition of public health</li> <li>1.5 History of public health</li> <li>1.6 Major disciplines in Public health</li> <li>1.7 Health Care Systems</li> </ol>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Melkie E., (2004), Nutrition for health extension workers: Lecture notes, Ethiopia
3,4,5	9	<ul> <li>4. Nutrition</li> <li>4.1 Definitions, Basic concepts</li> <li>4.2 Types of Nutrients</li> <li>4.3 The role nutrition on Health</li> <li>4.4 Nutrition and development</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Melkie E., (2004), Nutrition for health extension workers: Lecture notes, Ethiopia
6,7,8 ,9	8	<ul> <li>5. Malnutrition</li> <li>5.1 Definition of Malnutrition</li> <li>5.2 Types of malnutrition</li> <li>6. Causes and effects of Malnutrition Melkie E., (2004), Nutrition for health extension workers: Lecture notes, Ethiopia</li> <li>5.3</li> <li>5.4 Vulnerable Groups for Malnutrition</li> <li>5.5 Major nutritional problems in Ethiopia</li> </ul>	Listen to a lecture and take no lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Melkie E., (2004), Nutrition for health extension workers: Lecture notes, Ethiopia

9,10, 11,1 2	9	<ul> <li>4. Nutritional Assessment</li> <li>4.1 Methods of Nutritional Assessment</li> <li>4.1.1 Anthropometry</li> <li>4.1.2 Biochemical/biophysical methods</li> <li>4.1.3 Clinical methods</li> <li>4.1.4 Dietary methods.</li> </ul>	Listen to a lecture and take no lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions Visit nutritional assessment laboratory	MelkieE.,(2004),Nutritionforhealthextensionworkers:Lecturenotes,EthiopiaDisasterPreventionandPreparednessCommission(2002),GuidelineonEmergencyNutritionAssessment,Earlywarningdepartment,AddisAbaba,Ethiopia
12,1 3,14	6	<ul> <li>5. Nutritional Surveillance</li> <li>5.1 Definition</li> <li>5.2 Objectives of Nutritional Surveillance</li> <li>5.3 Sources of information on nutritional surveillance</li> <li>5.4 Types of nutritional surveillance</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Disaster Prevention and Preparedness Commission (2004), Emergency Nutrition InterventionGuideline, Early warning department Addis Ababa, Ethiopia Melkie E., (2004), Nutrition for health extension workers:Lecturenotes, Ethiopia
14,1 5,16	8	<ul> <li>6. Nutritional Intervention</li> <li>6.1 Definition</li> <li>6.2 Nutritional Interventions Strategies</li> <li>6.3 Emergency nutrition intervention</li> <li>6.4 Types of Feeding and Nutrition Supplementation Programs</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Disaster Prevention and Preparedness Commission (2004), Emergency Nutrition Intervention Guideline, Early warning department Addis Ababa, Ethiopia Shiferaw M and Fenta H. Epidemiology - A manual for students and health workers in Ethiopia. Yigzaw K., (2004).Epidemiology .Lecture notes for Environmental and Occupational Health Students

## LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

- 1 Lecture
- 2 Discussion
- 3 **Homework:** Homework assignments will be given to help reinforce some topics covered and not covered in class individually and in group.

### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (100%) which comprises relevant tests, assignments; project works, quizzes and final exam.

Activities	Marks
Quiz 1	7%
Test 1	8%
Assignment and presentation	10%
Mid Exam	25%
Final Exam	50%
Total	100%

#### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

### **COURSE POLICY**

All students are expected to abide by the code of conduct of articles (article 194 of The Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I will give out the directions, if I find necessary, for the assignments one week prior to their due date.

**Note on class attendance and participation:** You are expected to attend class regularly. I will take attendance on random days during the semester to ensure that students are coming to class, and if you miss class repeatedly, your grade will be affected. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. I will not allow you enter if you are late more than five minutes. I will often ask questions during my lectures and active participation in class is essential.

**Cell phones:** Cell phones must be turned off before entering the class as they are disruptive and annoying to all of us in the class. So, please make sure your cell phone is turned off before entering the class. You

are responsible for all class announcements and changes. All issues discussed in class or derived from other sources (where I provided you to read) may be the subject of assignment or final exam question items. Please follow the instructions indicated at each content of your course guidebook o complete all the assignments provided whether they are to be performed individually or in group.

### REFERENCES

- 7. Disaster Prevention and Preparedness Commission (2002), Guideline on Emergency Nutrition Assessment, Early warning department, Addis Ababa, Ethiopia
- 8. Disaster Prevention and Preparedness Commission (2004), Emergency Nutrition Intervention Guideline, Early warning department Addis Ababa, Ethiopia
- 9. Gebrezgi G., Sadik T.&SeifuH.(2005), Introduction to public health: Lecture notes, Ethiopia
- 10. Melkie E., (2004), Nutrition for health extension workers: Lecture notes, Ethiopia
- 11. Shiferaw M and Fenta H. Epidemiology A manual for students and health workers in Ethiopia.
- 12. Yigzaw K., (2004). Epidemiology . Lecture notes for Environmental and Occupational Health Students

#### Approved by:

Name     Course Instructor /Tutor     Signature							
Name Course chair			Sig	gnature			
Name Department Head			Sig	nature			
INSTITUTE OF DISASTER	BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES						
Program	Disaster Ri	isk Managen	ient	& Sustainable	Dev	elopment	
Courses code	Drms2056					•	
Courses Title	Developme	nt planning	and	disaster risk ro	educ	tion	
Degree Program	-	U		nent & Sustai			nent
Module name     Disaster and Development							
Module number 05							
Course chair							
Instructor/Tutor							
ECTS credit (CP)	5						
				Laboratory	&	Home	Total

		seminars	workshop	Study	
	48	-	-	60	108
Lecture days, hours & room					
Tutorial /lab days & hour					
Target group					
Year /semester					
Pre-requisites	None				
Status of the course	Major				

#### **Course Description**

This course generally deals with the basic ideas of development, the meaning, origin and experience of development planning, as well as the various theories of development and mainstreaming of disaster risk reduction in development planning.

### **Course Objectives:**

Upon successful completion of this course students are expected to:

- Understand the basic concept of development and development planning
- **4** Discuss the diverse structure of developing countries
- **↓** Discuss the common characteristics of developing countries
- **4** Examine the rationale behind development planning
- **4** Understand the different development planning theories
- 4 Scrutinize the basic ideas behind each theory
- 4 Discuss the major types of development planning
- **4** Explain the relationships of disaster and development
- 4 Analyze the relevance of mainstreaming disaster in development planning
- **4** Analyze the Ethiopian development planning processes
- 4 Discuss the role of development planning for disaster reduction in Ethiopian context

We	Lec	TATIVE SCHEDULE FOR THE CC Conceptual focus	Assignment / Task /	Readings
ek	tur	Conceptual focus	Assignment / Task /	Readings
CK	e			
	c (hr)			
	()	1. Introduction	Listen to a lecture and take notes	Todaro, M.P and Smith S.C .(
		1.8 The concept of Development &	on the lesson, Forward all the	2003). Economic Development.(pp
1-3	16	Growth	confusion or doubts trainee may	23-75).
-	_	1.9 Measures of Economic	have in relation to the given	,
		Development	lecture, take part in discussions	Course materials
		1.10 The Core Values of		
		Development		
		1.11 Diverse structure of		
		Developing Countries		
		1.12 Common Characteristics of		
		Developing Countries		
		1.13 Obstacles to Economic		
		Development		
		2. Development Planning	Listen to a lecture and take notes	Agrawal .A.N(1989). Economics
		2.1 Concepts and Definitions of	on the lesson, Forward all the	of Development and Planning
4-5	9	Development Planning	confusion or doubts trainee may	(pp45-70).
		2.2 Importance of Development	have in relation to the given	
		Planning	lecture, take part in discussions	
		2.3 Planning Process		
		2.4 Mandates of Development		Course materials
		Planning		
		2.5 The need for Development		
		Planning		
		2.6 Types of Development Planning		
		2.7 Components of Development		
		Planning 3. Theories of Development	Listen to a lecture and take notes	Todage MD and Smith S.C. (
		3. Theories of Development	on the lesson, Forward all the	Todaro, M.P and Smith S.C .( 2003). Economic Development.
	7	Planning 3.1 Introduction to development	confusion or doubts trainee may	(pp 150-200).
6-7	/	planning	have in relation to the given	(pp 150-200).
0-7		3.2 Classical theories of	lecture, take part in discussions	Agrawal .A.N (1989). Economics
		development planning	lecture, take part in discussions	of Development and Planning (pp
		3.3 Structural changes model		78-124).
		3.4 International Dependence		/0124).
		model		
		3.5 Neoclassical Counter		
		revolution: Market		
		fundamentalism		
	8	4. Development Planning and	Listen to a lecture and take notes	Benson, C & J Twigg. 2007.
		Disaster Risk Reduction	on the lesson, Forward all the	Tools for Mainstreaming
8		1. The nexus between disaster risk	confusion or doubts trainee may	Disaster Risk Reduction (pp 50-
		reduction and development	have in relation to the given	113).
		planning	lecture, take part in discussions	Contingency planning
		2. The enabling environment	-	guidelines. World Food

## TENTATIVE SCHEDULE FOR THE COURSE

		3. Contingency planning		Program. (pp 1-25).
9	8	<ul> <li>5 Development Planning in Ethiopia</li> <li>5.1. Introduction</li> <li>5.2. Decentralization and Development planning in Ethiopia</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Ethiopian Growth and Transformation Plan (2011-2014) (pp 1-75). PASDEP, (2005-2007) (pp 50- 100).
		5.3. Approaches to Development planning		Course materials

### LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

- Lecture
- **Reflections:** Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.
- **Homework:** Homework assignments will be given to help reinforce some topics covered and not covered in class individually and in group.

### ASSESSMENT METHODS

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, assignments; project works, quizzes and final exam.

	<b>(</b>
Activities	Marks
Test	8%
Quiz	7%
Assignment	10%
Group project	25%
Final Exam	50%
Total	100%

#### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

### **Course Policy**

All students are expected to abide by the code of conduct of students (Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I

Page | 262

will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

### REFERENCES

Todaro, M.P and Smith S.C.(2003). Economic Development. 10<sup>th</sup> edition. Agrawal .A.N (1989). Economics of Development and Planning Benson, C and J Twigg. 2007. Tools for Mainstreaming Disaster Risk Reduction: Guidance Notes for Development Organisations. Geneva: ProVention Consortium. Available Agenda 21 (2003) United Nations Department of Economic and Social Affairs, Division for Sustainable Development. Contingency planning guidelines (----). World Food Program. Ethiopian Publication: MoFED Publications and books as well as Journals on Ethiopian Economy.

Ethiopian Growth and Transformation Plan (GTP) (2011-2014)

**Bibliography** Approved by:

Name Course Instructor /Tutor

Name Course chair

Module name

Name Program manager

**Research Methods and Tools** 

Signature

	Widom at the communitate Dire Vie				
	BAHIR DAR UNIVERSITY				
INSTITUTE OF	DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES				
Program	Disaster Risk Management and Sustainable Development				
Courses code Drms 3076					
Courses Title	Senior Research Project Proposal				
Degree Program	BSc. in Disaster Risk Management and Sustainable Development				

Signature

Signature

Module number	05						
Course chair							
Instructor/Tutor							
ECTS credit (CP)	6						
Contact hours per week	Lectures	Tutorials seminars	&	Laboratory workshop	&	Home Study	Total
	-	48				144	162
Lecture days, hours & room	-						·
Tutorial /lab days & hour							
Target group							
Year /semester							
Pre-requisites	None						
Status of the course	Major						

## **Course Description:**

**Theory:** Principles of research proposal writings, elements of good research proposal, formatting of research proposals

**Practical:** Students will write a senior research proposal which has to be approved by their respective advisors and they are expected to carry out a research on the selected research topic. Students are expected to follow the standard proposal writing procedure in socio economic research. The proposal should demonstrate the students' skill to select researchable topic and develop it to well-articulated proposals.

Presentation: Students will present their proposals after approved by their respective advisors.

## **Course Objectives:**

The overall objective of this course is to acquaint students in writing viable and sound research proposal using scientific principles of research proposal writing.

At the end of the course students will be able to:

- Synthesize relevant literature to carry out research
- Identify research gap and select research topic
- Prepare good research proposal

## SCHEDULE OF LECTURE TOPICS AND READINGS

Duration	<b>Conceptual focus/Activities</b>	Mode of Teaching Learning
	Principles of research proposal	Students will read different literature
Week 1-2	writings	
	Student will review different	Students will read different literature
Week 3-16	literature	

	Discuss with respective advisor	Making Discussion with the advisor to take
Week 4-16	about the title of the Project	comment
		Making Discussion with the advisor to take
Week 3	Submission of the research title	comment
		Making Discussion with the advisor to take
Week 3-13	Develop the proposal	comment
		Making Discussion with the advisor to take
Week 14	Submit the first draft to advisor	comment
Week 14-	Incorporate the comment by	Making Discussion with the advisor to take
15	the advisor	comment
	Submit the final copy to the	Making Discussion with the advisor to take
Week 15	coordinator	comment
Week 16	Presentation	
A a a a a a a a a a t A A		

**Assessment Methods** 

Assessment Type	Allotted Points	Week
Presentation	40%	
Final proposal	60%	

**Course Policy:** All students are expected to abide by the code of conduct of students (article 166 and 166.1.1, of The Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

## **Reference:**

*Gustavii, B. (2003).* <u>*How to write and illustrate a scientific paper.*</u> *Cambridge University, UK: The Cambridge Press.* 

## Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Program manager

Signature

Signature

Signature



# INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

Program		Disaster Risk Management and Sustainable Development					
Courses code	Drms 3075	0			••••••		
Courses Title	Scientific V	Writing Skill a	nd S	Seminar Presenta	ation		
Degree Program				ment and Sustai		Developme	nt
Module name	<b>Research</b>	Methods and To	ools				
Module number	07						
Course chair							
Instructor/Tutor							
ECTS credit (CP)	3						
Contact hours per week	Lectures	Tutorials seminars	&	Laboratory workshop	&	Home Study	Total
	-	32		-		49	81
Lecture days, hours & room	-						
Tutorial /lab days & hour							
Target group							
Year /semester							
Pre-requisites							
Status of the course	Major						

#### **Course description**

As a prelude to independent seminar presentation, students will be introduced to organization and structure of presentation, discussion of good presentation styles, proper development and use of slides, overheads, PowerPoint, handouts and other necessary materials for good presentation.

Students will choose a specific topic related to disaster risk management, food security, climate change, environment and any development topic conduct literature review, preparing a term paper for seminar and present it to the staff and students.

#### Course objective and competences to be acquired

At the end of the course students should be able to:

- Develop skills on paper preparation
- Enhance their speaking and presentation skills
- Enhance their skill on how to review literatures

Week	Lecture	Conceptual Focus, Activities/tasks	Assignment / Task /
	hrs		
Week 1-8	8	General introduction about course and setting ground rules	Listen to a lecture and take notes on the lesson, Forward
		1.1.Literature Review	all the confusion or doubts
		Case studies	trainee may have in relation to
		1.2.Plagiarism and Academic ethics	the given lecture, take part in
		1.3.Organization and structure of seminar presentation	discussions.
		1.4 Development of Slides and PowerPoint	
		1.5 Discussion on styles of good presentation-What to do and What to avoid during presentation	
Week 9- 16	8	<b>Part Two:</b> Independent seminar presentation by students which will be reviewed by advisor and course instructor	Listen instructions given by the lecturer and ask questions prepare seminar reports and
Assessme	nt:	Report writing: 30% Seminar Presentation: 70%	
Course expectation	on	Preparedness for the presentation and participation during presentations is a requirement for all students	
Course po	olicy	Attendance: 85% course attendance is compulsory. Students are expected to be punctual. Students should provide tangible evidence in case of any absence.	
Reference	s	1. Jerome L. Myers, Arnold D. Well(2003), Research	
		Design and Statistical Analysis, Lawrence Erlbaum	
		Associates	
		2. Michael J. Katz(2006) From research to manuscript: A guide to scientific writing, ISBN: 9781402040450,1-	
		4020-4045-8	

Approved by:

Name Course Instructor /Tutor

Signature

Name Course chair

Signature

Name Program manager

Signature



#### BAHIR DAR UNIVERSITY INSTITUTE OF DISASTED BISK MANACEMENT AND FOOD SECURITY STUDIES

INSTITUTE OF DISASTER					
Program	Disaster R	Disaster Risk Management and Sustainable Development			
Courses code	Drms3067	,			
Courses Title	Migration	and Refugees			
Degree Program	BSc. Dis	aster Risk	Management a	nd Sust	ainable
	Developm	ent			
Module name	Disaster a	nd Cross cuttin	g issues		
Module number					
Course chair					
Instructor/Tutor					
ECTS credit (CP)	5				
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total
	32	-	-		
Lecture days, hours & room			•		
Tutorial /lab days & hour					
Target group	4 <sup>th</sup> year	Disaster Risk	Management	and Sus	tainable
	Developme	nt Students			
Year /semester	4 <sup>th</sup> Year, 1 <sup>st</sup> Semester				
Pre-requisites					
Status of the course	Major				

### **Course description**

Migration, both temporary and permanent, has always been a traditional response or survival strategy of people confronting environmental changes or to a complex pattern of factors including social, economic and political as well as environmental forces that endanger human welfare. Understanding the underlying factors and the risks associated with migration is therefore, an important step for designing effective policy measures and strategies in managing migration. The course deals with the concept of migration and refugees; laws and policies; causes of migration; internally displaced persons (IDPs); asylum seekers; refugee camps; health, education and livelihoods systems for refugees; organizations involved in refugee issues.

### **Course Objectives:**

By the end of this course, the student will:

- Discuss the causes, types and nature of Migration
- Explain temporary or permanent, internal or international migration
- Explain the nature of migration theories,

- Describe the Socio- economic Situation of displaced people
- Describe the relationship between refugees and host communities
- Describe the consequences of migration for the people who move, for those left behind and for the places of destination
- Explain the migration and refugee history of Ethiopia
- Revist asylum and refugee policies and international laws and Ethiopian experiences

## Tentative schedule for the course

Schedule	Lecture hour	CONCEPTUAL TOOLS	READINGS
		CHAPTER ONE: INTRODUCTION	
week 1	1	The concept of migration	Compiled notes &Power point
week 1 & 2	4	Types of migration	presentations
		Types of migration	
		Historical Development of Migration	
		Current trends of migration	
		Policy on Migration	
	_	Migration and social protection	
		CHAPTER TWO : CAUSES AND EFFECTS OF	Hand out and R.Poul
W1-0.02	3	MIGRATION	(1975)
Week 2 & 3		Causes of migration	
Week 3	3	Push factors Push factors	
Week 4	3	Networking Migration and disaster risk Destruction of Migration	_
week 4	3	and health risks	
		Migration Status and vulnerability	
		Migration, gender and vulnerability	
		Migration as a livelihood/coping strategy	
		CHAPTER THREE : INTRNAL AND	SjaastedL.A.(1962)
		INTERNATIONAL MIGRATION	~ <b>J</b> ••••••••••••••••••••••••••••••••••••
Week 5	1	Internal Migration	-
Week 5	3	Source of data	-
		Measurement of internal migration	
		Causes and Consequences	
Week 6	3	International Migration poverty reduction	
		Source of Data	
		Measurements	
		Past and present trends	
		Causes and Consequences	
		<b>CHAPTER FOUR : THEORIES OF</b>	
		MIGRATION AND REFUGEE	_
Week 7	3	Lee's Theory of Migration	4
Week 8	3	Tadaro's Model of Migration	
Week 9	3	Revenestein's law of Migration	
Week 10	3	Zelinsky's Hypothesis of the Mobility Transition	
Week 11	3	Refugee Theory	<b>R.Poul</b> (1975)
Week 12	3	CHAPTER FIVE : REFUGEES	

Week 13	3	Concepts of Refugees (2 hrs) Socio-Economic and Political situations of Refugee Campus Refugee's relationship with the host community	UNHCr(2001)
Week 14	3	Institutions involved in refugee camps International Conventions on refugees	
Week 15	3	Refugees and Migration history in Ethiopia	

## LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works

### Lecture

Reflections: Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.

Home work: Assignments will be given to help reinforce some topics covered or not covered in class

### ASSESSMENT METHODS

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, assignments; project works, quizzes and final exam.

### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Test 1	8%
Quiz	7%
Assignment	10%
Mid exam	25%
Final Exam	50%
Total	100%

Note: Grading: As per University's regulation

### **Course Policy**

**Course Policy:** All students are expected to abide by the code of conduct of students (article 166 and 166.1.1, of The Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions.

Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take

attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

### **Required readings:**

Name Program manager

Douglas W. MacPherson, Irregular migration and health, Migration Health Consultants Inc.

& Faculty of Health Sciences, McMaster University, Ontario, Canada

Susan F. Martin 2010. Climate change and migration, Study Team on Climate-Induced Migration

R.Poul (1975): Migration Theory and Fact, Philadelphia Regional Science Research, Philadelphia

Sjaasted L.A.(1962):The Cost and Return of Human Migration, Journal of Politica Economy,Vol.21						
UN (1998); Meeting the Challenges of Migration, New York						
<b>Recommended Reading:</b> UNHCr(2001): Convention and Protocol Relating to t	UNHCr(2001): Convention and Protocol Relating to the Status of Refugee,GenevaUN (2006): Assistance to Refugee, Returnees and Internally Displaced Personsin Africa,New York					
NameCourse Instructor /TutorSignatureDate						
NameCourse chairSignatureDate						

Signature

Date



#### BAHIR DAR UNIVERSITY

## INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

Program	Disaster risk m	Disaster risk management and sustainable development				
Course code	Drms4061					
Course title	Gender Disaste	r and development				
Degree program	Bsc. disaster ris	k management and	sustainable dev	elopment		
Module name	Cross cutting is	ssue in DRM				
Module number	M06					
Course chair	Yoseph Tamer	u				
Instructor/tutor	Neima Ahmed					
ECTS credit CP	Lectures	Tutorial &	Laboratory	Home study	Total	
		seminar	& workshop			
Contact hour per week	3(+0)			5	8	
Lecture days, hours & room						
Tutorial/lab days and hours	-					
Target group	3 <sup>rd</sup> year Disaster Risk Management and Sustainable Development Students					
Year/ semester	3 <sup>rd</sup> Year, 1 <sup>st</sup> Semester					
Pre-requisite	None					
Status of the course	Common					

#### **Course description**

The main purpose of this course is to introduce students about the terminology and concepts of gender, gender analysis, gender-based inequalities, gender mainstreaming, gender equality, the relationship between gender and disaster and gender and development: the differential impacts of disaster on women and men. And also, it describes about gender focused approaches to development. It also aims to aware students about the vulnerable groups of disaster and actions to be taken in order to ameliorate the problems of women before, during and after disasters.

#### Objectives

Up on the successful completion of this course the students will be able to;

- Identify the conceptual differences between sex and gender;
- Describe the common areas and the variations in the construction of gender in different social and cultural contexts

- Describe the relationship between gender and disaster
- Understand basic concepts of gender and development;
- Explain gender focused approaches to development
- Describe the vulnerable groups of disaster
- Understand concept and tools for gender analysis
- Try to link gender problems to disasters and formulate appropriate solutions to tackle problems of women;

### Tentative schedule for the course

Week	Lectur	Conceptual focus	Assignment task	Reading
	e/hr			
	8	Chapter 1: Introduction to Gender,	Listen to a lecture and	Enarson E,(2000) gender
		Disaster and Development	take note on the lesson,	and natural disaster
		1 1.1 Introduction to Gender	forward all the	Geneva rout des morillon
		1 1.2 Difference between Gender	confusion doubts trainee	Williams, S. (1994)
		And Sex.	may have in relation to a	Oxfam Gender Training
		1.3 Gender terminologies	given take part in	Manual. Oxford: Oxfam
		1.4 Socialization	discussion	
		1.5 Gendered Activities, Roles and		
		Responsibilities		
	9	Chapter:2 Gender and Disasters	Listen to a lecture and	Leavey (1992) gender &
		2.1 Basic Concepts of Disaster	take note on the lesson,	the environment
		Management	forward all the	The challenge of cross
		2.2 Relationship between hazard,	confusion doubts trainee	cutting in development
		vulnerability and disaster	may have in relation to a	planning &environment
		2.3 Vulnerability of Women and Men	given take part in	and urbanization 4;1
		in Disasters	discussion	
		2.4 linkages of gender and disaster		
	9		Listen to a lecture and	Leavey (1992) gender &
		Chapter 3 Gender and Development	take note on the lesson,	the environment
		3.1 Define Development	forward all the	The challenge of cross
		3.2 Dimensions of development	confusion doubts trainee	cutting in development
		3.3 Sustainable Development	may have in relation to a	planning &environment
		3.4 linkage of gender and development	given take part in	and urbanization 4;1
		Chapter 4: Gender Approaches	discussion	
		4.1 Gender Focused Approaches to		Moser (1993)gender
	8	Development	Listen to a lecture and	planning and development
		4.1.Gender and Development (GAD)	take note on the lesson,	theory, practice and
		4.2 Women in Development (WID)	forward all the	training . London Rutledge
			confusion doubts trainee	chapter1:3
			may have in relation to a	Homebereg H.v.d Gender
			given take part in	and development a
			discussion	Bibliography university of
				Amsterdam

7	Chapter 5: Gender and vulnerable	Listen to a lecture and	Williams (1994)Oxfam
	Factors of Disaster	take note on the lesson,	gender training manual
	6.1 Global Action on Gender-Sensitive	forward all the	oxford Oxfam
	Disaster Risk Reduction	confusion doubts trainee	Enarson,E(2000) gender
	6.2 Vulnerability Factors related to	may have in relation to a	and natural disaster,
	gender	given take part in	Geneva Route Des
		discussion	Moillons
	Chapter 6: Vulnerable groups of	Listen to a lecture and	Walia Ajinder (2015): ToT
	Disaster	take notes on the	Module on Gender and
	7.1 Vulnerable populations for disaster	lesson, Forward all the c	Disaster Management.
	7.1.1 undocumented workers	on fusion or doubts	National Institute of
	7.1.2 Children	trainee may have in	Disaster Management,
	7.1.3 pregnant women	relation to the given	New Delhi.
	7.1.3 elderly persons	lecture, take	
	7.1.4 individuals with disabilities	part in discussions	
	7.2 Factors of vulnerability		
	Chapter 7: Actions to be taken	Listen to a lecture and	Hazel Reeves and Sally
	8.1 Gender analysis and vulnerability	take notes on the	Baden, 2000: Gender and
	assessments 8.2 Gender-fair disaster interventions	lesson, Forward all the c	Development
	8.3 Sustainable income-generating	on fusion or doubts	
	projects	trainee may have in	
	r .J	relation to the given	
		lecture, take	
		part in discussions	

## **INSTRUCTIONAL METHODS**

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation, and field work.

### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (100%) which comprises relevant tests, assignments/ project works, quizzes, mid and final exam.

······································		
Activities	Marks	
Quiz 1	7%	
Test 1	8%	
Assignment and presentation	10%	
Mid Exam	25%	
Final Exam	50%	
Total	100%	

SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

#### **COURSE POLICY**

All students are expected to abide by the code of conduct of (article 194 of The Senate Legislation of Bahir Dar University May 9, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I will give out the directions, if I find necessary, for the assignments one week prior to their due date.

**Note on class attendance and participation:** You are expected to attend class regularly. I will take attendance on random days during the semester to ensure that students are coming to class, and if you miss class repeatedly, your grade will be affected. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. I will not allow you enter if you are late more than five minutes. I will often ask questions during my lectures and active participation in class is essential.

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#### Reference

Enarson, E. (2000). Gender and Natural Disasters, Geneva: Route des Morillons.

Moser, C.O.N. (1989) Gender Planning in the Third World: Meeting Practical and Strategic Needs. World Development 17:11

Moser, C.O.N. (1993) Gender Planning and Development: Theory, Practice and Training. London: Routledge. Chapters 1-3

Levy, C. (1992) Gender and the Environment: The Challenge of Cross-Cutting Issues in Development Policy and Planning. Environment and Urbanisation 4:1

Hombergh, H. v.d. (1994) Gender, Environment and Development: A Bibliography. University of Amsterdam: INDRA.

Williams, S. (1994) Oxfam Gender Training Manual. Oxford: Oxfam.

#### Approved by:

Name Course Instructor /Tutor <u>Neima Ahmed</u>	Signature
Name Course chair <u>Yoseph Tameru</u>	Signature
Name Department head <u>Adey Belete</u>	Signature

Nidom at the curve of the Dire Vite BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES				
Program	Disaster Risk Management and Sustainable Development			
Courses code	Drms4065			
Courses Title	Disaster Epidemiology			
Degree Program	BSc. in Disaster Risk Management and Sustainable Development			
Module number	06			
Course chair	Yosef Tamiru			
Instructor/Tutor	Yidenkachew Merkeb			
ECTS credit (CP)	5			
Contact hours per term	LecturesTutorials & seminarsLaboratory & workshopHome StudyTotal			
	48 <mark> 114 162</mark>			
Lecture days, hours	-			
& room				
Tutorial /lab days	lays			
& hour				
Target group	4 <sup>th</sup> Year DRMSD Students			
Year /semester	4 <sup>th</sup> Year Semester I			
Pre-requisites	-			
Status of the course	Major			

#### **Course Description**

This course generally deals with the concepts of epidemiology, causes of disease and levels of disease prevention, measurements of morbidity and mortality, public health surveillance and the main steps for conducting epidemic investigation.

#### **Course Objectives:**

Upon successful completion of this course, students are expected to:

- **4** Describe the basic concept of Epidemiology
- **4** Identify different risk factors for disease
- **4** Describe the levels of disease prevention
- **4** Calculate the most important morbidity and mortality measures
- **4** Explain the purpose and types of surveillance
- **4** Identify different steps in the investigation of epidemic
- ↓ Discuss the management of epidemic

Week	Lecture (hr)	Conceptual focus	Assignment / Task /	Readings
1,2,3	8	1. Introduction	Listen to a lecture and take	
		1.1 History of epidemiology	notes on the lesson, Forward	
		1.2 Definition of epidemiology	all the confusion or doubts	
		1.3 Purpose of epidemiology	trainee may have in relation	
		1.4 Roles of epidemiology	to the given lecture, take part	
		1.5 Types of epidemiology	in discussions	
3,4,5,6	9	2. Disease causation and level of prevention	Listen to a lecture and take	
		2.1 Definition	notes on the lesson, Forward	
		2.2 Causes of disease	all the confusion or doubts	
		2.3 Model of disease causation	trainee may have in relation	
		2.4 Levels of prevention	to the given lecture, take part	
		2.5 Natural history of disease	in discussions	
		2.6 Infectious diseases		
6,7,8,9,	11	3. Measurements of Morbidity and Mortality	Listen to a lecture and take	
10		3.1 Measurement of health	notes on the lesson, practice	
		3.2 Ratio, proportion and rates	CRA tools in the field.	
		3.3 Measurements of morbidity		
		3.4 Measurements of mortality		
		3.5 Measuring risk		
10,11,1	10	4. Public Health surveillance	Listen to a lecture and take	
2,13		4.1 Purposes and uses of surveillance	notes on the lesson, Forward	
,		4.2 Types of surveillance	all the confusion or doubts	
		4.3 Sources of data and methods of data collection	trainee may have in relation	
		4.4 Features of good surveillance system	to the given lecture, take part	
		4.5 Conducting surveillance	in discussions	
		4.6 Integrated disease surveillance system		
13,14,1		5. Epidemic Investigation and Management	Listen to a lecture and take	
5,16	10	5.1 Levels of Disease occurrence	notes on the lesson, Forward	
- ,	-	5.2 Measuring disease occurrence	all the confusion or doubts	
		5.3 Types of epidemics	trainee may have in relation	
		5.4 Investigation of an epidemic	to the given lecture, take part	
		5.5 Steps of epidemic Investigation	in discussions	
		5.6 Epidemic management strategies		
	l			

#### SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READING

## LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

- Lecture
- Discussion
- **Homework:** Homework assignments will be given to help reinforce some topics covered and not covered in class individually and in group.

## **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (100%) which comprises relevant tests, assignments/ project works, quizzes, mid and final exam.

Activities	Marks
Quiz 1	7%
Test 1	8%
Assignment and presentation	10%
Mid Exam	25%
Final Exam	50%
Total	100%

SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

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### REFERENCES

- 1. Yamane B. (2004). Principles of Epidemiology: lecture note. Addis Ababa, Ethiopia.
- 2. Susan Carr, Nigel Unwin and Tanja Pless-Mulloli. (1997). An introduction to public health and epidemiology.Mc Graw HillOpen University Press
- 3. Gebrezgi G, Sadik T and SeifuHagos. (2006).Introduction to Public Health. Lecture notes for health science students
- 4. Mausner and Bahn. Introductory text of epidemiology. Second Edition. W. B. Saunders.
- 5. Fletcher M. Principles and practice of Epidemiology.
- 6. Barker DJP. Practical Epidemiology. 3rdedition
- 7. Epidemiology in community health. Jane McCusker series

Approved by:

Name Course Instructor /Tutor

Name Course chair

Signature

Signature

Name Department Head

Signature



#### **BAHIR DAR UNIVERSITY**

INSTITUTE OF DIS	ASTER RIS	SK MANAGEMEN'	T AND FOOD SECUR	ITY STUD	IES
Program	Disaster I	Risk Management	and Sustainable Dev	elopment	
Courses code	Drms 404	5			
Courses Title	<b>Fire Risk</b>	Management			
Degree Program	BSc. in D	isaster Risk Mana	gement and Sustaina	ble Develo	pment
Module name	Conceptu	al Understanding	of Disaster Risk Mar	nagement	
Module number	04				
Course chair					
Instructor/Tutor					
ECTS credit (CP)	05				
Contact hours	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total
	32	-	48	55	135
Lecture days, hours & room	-				
Tutorial /lab days & hour					
Target group	4 <sup>th</sup> year Disaster Risk Management and Sustainable Development Students				
Year /semester	4 <sup>th</sup> Year,	1 <sup>st</sup> Semester			
Pre-requisites	None				
Status of the course	Supportiv	/e			
Course Description					

**Course Description** 

The general objective of this course is to equip students with the knowledge, skills and attitudes that will enable them to identify the conditions capable of causing fire, know how to use firefighting equipment, respond appropriately to fire emergencies and adequately implement fire emergency procedures. This course also will cover principles of fire and explosion, causes and prevention of fires, fire protection in structures and forest and ensuring the safety of people in the event of fire. Crucially, the practical element of the course also ensures that participants can carry out, unaided, a fire risk assessment and prepare a recommendations report for management.

## Objectives

Up on the successful completion of this course the students will be able to;

- Describe the nature, behavior and combustion process of fire
- Analyze fire management strategies
- Develop theoretical and practical application of fire extinguishers
- Describe the legislative framework and the mechanism of enforcement of fire safety
- Conduct a fire risk assessment and compile a report
- Analyze the concepts and management of wildfire
- Identify the search and rescue activities in the context of fire

Week	Lecture(hrs)	Contents	Activities/tasks	Readings
1-2	6	<ul> <li>Chapter1. Introduction to Fire Risk and Trends</li> <li>Introduction to fire</li> <li>Trends in fire risk</li> <li>Large fire events in Ethiopia and consequences, challenges in fire risk management</li> <li>Fire Service History and Culture in Ethiopia</li> </ul>	Power Point presentation, activities, group discussion	Module
3-5	9	<ul> <li>Culture in Europia</li> <li>Chapter 2.Fire chemistry and behavior</li> <li>Science of fire (Meaning of fire and process of fire formation)</li> <li>Causes of fire</li> <li>Elements of fire</li> <li>Modes of fire combustion</li> <li>Source and transmission method of heat</li> <li>Classifications of fire</li> <li>Stage of fire development</li> <li>Factor affecting fire development</li> <li>Fire behavior</li> </ul>	Listen to videos, practical demonstrations and activities	Module American safety and health institute (2008), Basic first aid for the community and workplace International Fire Service Training Associations (2013). Essentials of Fire Fighting (6th Ed.). Oklahoma State University: Walsworth Publishing
6-9	9	<ul> <li>Chapter Three. Fire Risk Assessment</li> <li>Fire risk assessment methodologies and applications</li> <li>Guidance documents</li> <li>Syndicated fire risk assessment practical exercise, report completion and report debrief</li> </ul>	<ul> <li>-Listening the lecture and taking short notes</li> <li>- Asking questions which are not clear in the lecture</li> </ul>	Module American safety and health institute (2008), Basic first aid for the community and workplace

# Schedule of Lecture Topics, Activities and Readings

10-11	6	<ul> <li>Chapter Four. Fire Prevention</li> <li>What is fire prevention?</li> <li>Elements in fire prevention (removing/reducing sources of Ignition, sources of fuel and sources of oxygen)/ Clearance of combustible materials</li> <li>Access to roof-space</li> <li>Fire-retarding materials</li> <li>Educating workers public safety</li> </ul>	Power point presentation, video visualizations, practical demonstrations and activities portable fire extinguishers, drill.	Module American safety and health institute (2008), Basic first aid for the community and workplace International Fire Service Training Associations (2013). Essentials of Fire Fighting (6th Ed.). Oklahoma State University: Walsworth Publishing
12-13	6	<ul> <li>Chapter Five. Fire Protection Systems</li> <li>Fire detection and alarm systems</li> <li>Methods of fire extinguishment and extinguishing agents</li> <li>Firefighting equipment and facilities (portable fire extinguishers, Fixed extinguishers, Fixed extinguishing systems)</li> <li>Application of portable Firefighting Equipment</li> <li>Escape routes</li> <li>Emergency escape lighting</li> <li>Signs and notices</li> <li>Installation, testing and maintenance</li> </ul>	PowerPoint presentation, video visualizations, practical demonstrations and activities portable fire extinguishers , drill.	Module American safety and health institute (2008), Basic first aid for the community and workplace Bennet.J.A. <i>et al.</i> 2003.The Fire Chief's Handbook (6thEd.)United State of America. International Fire Service Training Associations (2013). Essentials of Fire Fighting (6th Ed.). Oklahoma State University: Walsworth Publishing

14	3	<ul> <li>Chapter Six. Fire Control</li> <li>Size Up</li> <li>Direct fire fighting</li> <li>Indirect fire fighting</li> <li>Offensive technique</li> <li>Defensive technique</li> </ul>	-Listening the lecture and taking short notes -Asking questions which are not clear in the lecture -Take part in reading assignment - Practical demonstration	Module American safety and health institute (2008), Basic first aid for the community and workplace Bennet.J.A. <i>et al.</i> 2003.The Fire Chief's Handbook (6thEd.)United State of America. International Fire Service Training Associations (2013). Essentials of Fire Fighting (6th Ed.). Oklahoma State University:
15-16	6	<ul> <li>Chapter Seven: Wildfire Management <ul> <li>Basics of Wildfire</li> <li>Behavior and classification of wild fire</li> <li>Wildfire prevention strategy</li> <li>Wildfire emergency management</li> <li>Organization and management of wild fire</li> </ul> </li> <li>Fire Fighting <ul> <li>Strategy</li> <li>Human Resources Management</li> <li>Fire Fighting Equipment</li> </ul> </li> </ul>	<ul> <li>-Listening the lecture and taking short notes</li> <li>-Asking questions which are not clear in the lecture</li> <li>-Take part in reading assignment</li> <li>- Take part in group discussion</li> <li>Example fire safety maintenance checklist</li> <li>Technical information on fire-resisting separation, fire doors and door fastenings</li> </ul>	Walsworth Publishing Module American safety and health institute (2008), Basic first aid for the community and workplace Bennet.J.A. <i>et al.</i> 2003.The Fire Chief's Handbook (6thEd.)United State of America. Food and Agriculture Organization of the United Nations, 2010.Wild land Fire Management Handbook for Trainers, Rome. Food and Agriculture Organization of

	the United Nations, 2001 Global Forest Fire Assessment 1990- 2000
Chapter Eight: Search and Rescue  Introduction to search and rescue  Search techniques  Rescue techniques How to use search and rescue equipment	

### **INSTRUCTIONAL METHODS**

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation, lab activities and field work.

Activities	Marks
Quiz 1	7%
Test 1	8%
Assignment and presentation	10%
Mid Exam	25%
Final Exam	50%
Total	100%

Note: Grading: As per University's regulation

## **Course policy**

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## References

American Red Cross society 2nd edition, standard first aid and personal safety

American safety and health institute (2008), Basic first aid for the community and workplace

Bennet.J.A. et al. 2003. The Fire Chief's Handbook (6thEd.) United State of America.

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California State Fire Department, 2009. Rescue Systems 1: Instructor and Student Manual

Fire Precautions (Workplace) Regulations 1997, SI 1997/1840. The Stationery Office 1997. ISBN 0 11 064738

Fire Precautions (Workplace) (Amendment) Regulations 1999, SI 1999/1877

Food and Agriculture Organization of the United Nations, 2010. Wild land Fire Management Handbook for Trainers, Rome.

International federation of red cross and red crescent societies(2016), International first aid and resuscitation guidelines

International Fire Service Training Associations (2013). Essentials of Fire Fighting (6th Ed.). Oklahoma State University: Walsworth Publishing

Lao national first aid curriculum development technical working group(2014) Trainer manual

Regulatory Reform (Fire Safety) Order 2005, SI 2005/1541. The Stationery Office, 2005. ISBN 0 11 072945

Regulatory Reform (Fire Safety) Order 2005, SI 2005/1541. The Stationery Office, 2005. ISBN 0 11 072945 5.Fire Precautions Act 1971 (c 40). The Stationery Office, 1971. ISBN 0 10 544071X.

The Stationery Office, 1999. ISBN 0 11 082882.

Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Department head

Signature

Signature

Signature



## INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

INSTITUTE OF DISASTER	KISK WARF	AGENIENI AN	D FOOD SECUR	111 910	UDIES			
Program	Disaster R	Disaster Risk Management & Sustainable Development						
Courses code	Drms4041							
Courses Title	Climate Change and Disaster							
Degree Program	BSc. Disaster Risk Management & Sustainable Development							
Module name	Conceptual Understanding of Disaster Risk Management							
Module number	04							
Course chair								
Instructor/Tutor								
ECTS credit (CP)	4	4						
Contact hours	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total			
	48	-	-	60	108			
Lecture days, hours & room								
Tutorial /lab days & hour								
Target group	4 <sup>th Year</sup> DR	4 <sup>th Year</sup> DRMSD Students.						
Year /semester	4 <sup>th</sup> Year 1	4 <sup>th</sup> Year 1 <sup>st</sup> semester						
Pre-requisites	None							
Status of the course	Major							

#### **Course description**

This course deals with basic elements of weather and climate; the origin and composition of the atmosphere as well as the earth's energy budget. Classification of climates: Overview of bases for classification systems. Climate change: concepts, global and local climate change; causes and effects. Concepts of climate change adaptation and mitigation, the linkages between climate change adaptation and disaster risk reduction, the need to mainstream CCA in different development sectors. Climate zones of Ethiopia, seasons, etc. Agro-ecology of Ethiopia; weather systems affecting Ethiopia. Climate related hazards of Ethiopia: drought, flooding etc.

#### **Course Objectives:**

At the end of the course, students are expected to

- List the different layers of the atmosphere
- > Understand and explain the elements of weather and climate
- Explain the behavior of the atmosphere
- Know the causes and effects of climate change
- > Understand concepts of climate change adaptation and mitigation
- Understand the linkage between CCA and DRR
- ➢ Know the weather pattern that affects Ethiopia
- > Understand and explain climatic related hazards of Ethiopia

	Tentat	tive schedule for the course		
We ek	Lec (hr)	Conceptual focus	Assignment / Task /	Readings
1, 2 and 3	8	<ol> <li>Introduction</li> <li>1.1 Atmospheric Composition</li> <li>1.2 Layers of the atmosphere</li> <li>1.3 Atmospheric Resources</li> <li>1.4 Elements of Weather and Climate</li> </ol>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	C.Donald Ahrens :Essentials of Meteorology (pp53-107) -Dennis L.Hartmann: Global Physical Climatology (pp1- 17)
4, 5, and 6	8	<ul> <li>2 Climate Change and Global Warming</li> <li>2.1 Introduction</li> <li>2.2 Factors related to climate change</li> <li>2.3 Causes of climate change</li> <li>2.4 Consequences of climate change</li> <li>2.5 Future projections of climate change</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	C.Donald Ahrens:Essentials of Meteorology (pp1-24) - Handout
7, 8 and 9	16	<ul> <li>3 Climate Change Adaptation (CCA)</li> <li>3.1 Concepts of climate change adaptation</li> <li>3.2 why Should Climate Change Adaptation Interest Development Agencies/Organizations</li> <li>3.3 The Current Climate Change Adaptation/ Mainstreaming Climate Change Adaptation</li> <li>3.4 CCA and Other development sectors</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Handout - C.Donald Ahrens:Essentials of Meteorology (pp 340-372)
10, 11, and 12	8	<ul> <li>4 Linking CCA and DRR</li> <li>4.1 Introduction</li> <li>4.2 Similarities and differences between CCA and DRR</li> <li>4.3 The need for closer collaboration</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	C.Donald Ahrens:Essentials of Meteorology (pp 198-228)
13, 14, 15 and 16	8	<ul> <li>5. The Climate System of Ethiopia</li> <li>5.1 Climate zone and season</li> <li>5.2 Weathering system affecting Ethiopia</li> <li>5.3 Agro-ecological classification of Ethiopia</li> <li>5.4 Climate and Agriculture</li> <li>5.5 Climate factors in crop production</li> <li>5.6 Climate related hazards in Ethiopia</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Handout -Harpal S. Mavi and Graeme J.Topper (2005). Agrometeorology principles and applications of climate studies (pp 209-236)

### LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

#### ASSESSMENT METHODS

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, assignments; project works, quizzes and final exam.

#### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Test	8%
Quiz	7%
Individual Assignment	10%
Mid Exam	25%
Final Exam	50%
Total	100%

Note: Grading: As per University's regulation

#### **COURSE POLICY**

All students are expected to abide by the code of conduct of students (article 166 and 166.1.1, of The Senate Legislation of Bahir Dar University May 20, 2005) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor.

Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date though they are explained at each content of your course guidebook.

Note on class attendance and participation: You are expected to attend class regularly. I will take attendance on random days during the semester to ensure that students are coming to class, and if you miss class repeatedly, your grade will be affected. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. I will not allow you enter if you are late more than five minutes. I will often ask questions during my lectures and active participation in class is essential

Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources (where I provided you to read) may be the subject of assignment or final exam question items. Please follow the instructions indicated at each content of your course guidebook to complete all the assignments provided whether they are to be performed individually or in group.

# Reference

Thomas D. Potter and Bradley R. Colman (2003). The handbook of weather, climate, and water : dynamics, climate physical meteorology, weather systems, and measurements. Harpal S. Mavi and Graeme J.Topper (2005). Agro meteorology principles and applications of climate studies. Dennis L.Hartmann (1994): Global Physical Climatology

C.Donald Ahrens: Essentials of Meteorology. Third edition.

# Approved by:

Name Course Instructor /Tutor

Signature

Name Course chair

Signature

Name Department head

Signature

Reference of the Dire Vice BAHIR DAR UNIVERSITY								
INSTITUTE OF DISASTER I								
Program Courses code	Disaster Ki Drms 4068	<u> </u>	nt and Sustainable	e Developmen	ll			
Courses Title		d Trauma Cou	ngoling					
			nagement and Sus	tainable Dov	lonmont			
Degree Program Module name			0	stamable Devo	elopment			
		d Cross-cuttin	g issues					
Module number	06							
Course chair								
Instructor/Tutor								
ECTS credit (CP)	4							
Contact hours per week	Lectures	Tutorials	Laboratory	Home Study	Total			
	48	-		60	108			
Lecture days, hours & room		•	•	•				
Tutorial /lab days & hour	1							
Target group	1							
Year /semester	1							
Pre-requisites	Compulsor	·y						

#### **Course Description**

The course will equip the students with the theories and applications of guidance and counseling to produce Disaster risk managers, practitioners with knowledge of disaster and trauma counseling. it deals mainly with the psychology of counseling, the concepts of trauma, the main theoretical and conceptual backgrounds of trauma and counseling. The course familiarizes students with the knowledge of trauma counseling and intervention mechanisms. The course will introduce the knowledge, concepts of Post-Traumatic stress Disorder (PTSD) and its healing mechanism (interventions). The course will also acquaint students with the knowledge of stress management and its major phases. More over, the course also offers the knowledge of culture, transference with a major concept and application of trauma counseling.

In each of the following chapters I believe you will have important times to know about disaster trauma counseling which centrally deals about the problems in mental health. I advise you to take time to read on the reading materials that are proposed here and hope you will enjoy the course

#### **Course objective**

At the end of this course, students will e able to:

Define trauma

Identify the stages of providing trauma counseling

Describe traumatic and stressful events

Understand common responses to these events

Be familiar with the models for conceptualizing response to traumatic experiences

Explain psychological sequel associated with exposure to potentially traumatizing events

Identify risks and protective factors associated with post-traumatic adjustments

Describe specific types of traumatic events

Understand areas of controversy with in the field and an overview of traumatic issues

weeks	Chapter	Focus areas	Readings /assignments
1, 2 and 3	Chapter one: an overview of counseling	Definition and concepts of counseling Aims of counseling Counseling and interpersonal communication Basics of interpersonal communication Person-centered counseling Phases of a counseling sessions Empathy and counseling Listening skills in counseling Ethics in counseling	Handout Hand book of counseling psychology(2008) Pp27-45
4, 5 and 6	Chapter two: Trauma counseling	The trauma concept Symptoms and impact of trauma A range of support capabilities Emergency tips for crisis situation The psychological impact of trauma on self and care givers	Handout Hand book of counseling psychology(2008) Pp65-92 Post-traumatic stress disorder for dummies(2008) pp23-74 effective treatment for PTSD(2009) all pages
7, 8 and 9	Chapter three: stress management	Introduction and conceptualizing stress management	Handout Coping with life stress(2008) All pages
10, 11 and 12	Chapter four: Disaster and trauma interventions and counseling theories	Developing a personal approach to counseling Overview of mental health intervention Counseling theories and their applications Disaster and trauma counseling interventions Rehabilitation counseling	Handout Trauma rehabilitation after war &conflict(2010) All pages Treating trauma survivors with PTSD(2002) Multiculturalism and learning style(1995)
13, 14, 15 and 16	Chapter five: culture, transference and counter- transference and values and counseling	Provision of culture competence counseling A working model for the complex interaction between Refugee client and therapist Values in counseling and psychotherapy	Handout

# LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works

Lecture

Reflections: Keep a weekly written reflection of students' reactions, questions about the readings and discussions in class.

Home work: Assignments will be given to help reinforce some topics covered or not covered in class

## **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, individual and group assignments, quizzes and final exam.

SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Test	8%
Quiz	7%
Individual Assignment	10%
Mid Exam	25%
Final Exam	50%
Total	100%

Note: Grading System: As per University's regulation

Course Policy: All students are expected to abide by the code of conduct of students (article 166 and 166.1.1, of The Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

## References

Foa, keane, at al, (2009) Effective treatments for PTSD Dunn & Griggs (1995) Multiculturalism and learning style Yehuda(2002) treating trauma survivors with PTSD Harihara &Rath( 20080 coping with life stress Brown & Lent (2008) Hand book of counseling Psychology Gonlston( 2008) post traumatic stress disorder for dummies Martz (2010) trauma rehabilitation after war and conflict

## Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Program manager

Signature

Signature

Signature

INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES								
Program	Disaster Ri	isk Managem	ent	& Sustainable	Dev	elopment		
Courses code	Drms4055							
Courses Title	Project Pla	nning and M	[ana	gement				
Degree Program	BSc. Disast	ter Risk Man	agei	nent & Sustain	abl	e Develop	ment	
Module name	Disaster Ri	isk Managem	ent	and Developme	ent			
Module number	05							
Course Chair								
Instructor/Tutor								
ECTS credit (CP)	4							
Contact hours per week	Lectures	Tutorials seminars	&	Laboratory workshop	&	Home Study	Total	
	32	-		-		49	81	
Lecture days, hours & room								
Tutorial /lab days & hour								
Target group								
Year /semester								
Pre-requisites	None							
Status of the course	Major							

### **Course description**

This course will deal with the nature of projects or program and the project cycle, logical framework analysis, *Project worth measurement methods and finally risk and uncertainty assessment for project sustainability*. The course touches issues related to project feasibility and sustainability analysis. It also highlights project proposal writings and fund raising techniques.

## **Course Objectives:**

Upon successful completion of this course students are expected to:

- Define projects, understand and describe the difference between projects and programs;
- Define, describe and design logical framework and describe its elements;
- Identify and describe the five major cycles of the project;
- Identify and describe the benefit and cost streams of agricultural project;
- Understand and able to prepare financial analysis of agricultural project;
- Understand and able to prepare economic appraisal of any project from any financial analysis of a project;
- Understand and able to measure risk and uncertainty of an agricultural project; and
- Understand and able to measure Switching Value (SV) and Sensitivity Analysis (SA) of a project.
- The variables that need to be considered in project feasibility and sustainability analysis and techniques of soliciting fund.
- Prepare a project document and implement and manage it as development practitioner.

Week	Lecture	Conceptual focus	Assignment / Task /	Readings
1 <sup>st</sup> -2 <sup>nd</sup>	(hr) 6	<ul> <li>Chapter 1. Introduction</li> <li>1.1 Historical origin of Project</li> <li>1.2 Conceptual definition of Project and Program</li> <li>1.3 Difference and Similarities between Project &amp; program</li> <li>1.4 Why projects are important?</li> <li>1.5 Unique Features of project</li> <li>1.6 Types of project</li> <li>1.7 Agricultural projects vs other type projects</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Goodman LJ and Love RN (Eds) (1980). Project Planning and Management.(pp 1-20) DFID (1995) Stackholder Participation and Analysis (pp 5- 10) Chandra, 1980
3 <sup>rd</sup> -4 <sup>th</sup>	6	(difference, similarities <b>Chapter 2. Project Cycle Management</b> 2.1. Project identification 2.2. Project Appraisal 2.3. Project Design	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts	Gittinger, 1982 Goodman LJ and Love RN (Eds) (1980). Project Planning and Management. (pp 25-40)
		<ul> <li>2.4. Project Implementation</li> <li>2.5. Project Monitoring &amp; Evaluation</li> <li>2.6. Logical Framework Analysis</li> <li>2.7Elements of the projects logical framework</li> </ul>	trainee may have in relation to the given lecture, take part in discussions	DFID (1995) Stackholder Participation and Analysis (pp 15-30)
5 <sup>th</sup> -6 <sup>th</sup>	6	<ul> <li>Chapter 3: Identifying Project Costs &amp; Benefits</li> <li>3.1 Objectives of identifying Costs and Benefits</li> <li>3.2 category of project costs and benefits</li> <li>3.2.1 direct and indirect costs of project</li> <li>3.2.2 direct and indirect benefits of project</li> <li>3.3 With and Without Project Comparison</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Goodman LJ and Love RN (Eds) (1980). Project Planning and Management. (pp 25-40) DFID (1995) Stackholder Participation and Analysis (pp 15-30)
7 <sup>th</sup> -8 <sup>th</sup>	6	<ul> <li>Chapter 4: project formulation aspects</li> <li>4.1 technical aspect of project</li> <li>4.2 financial aspect of project</li> <li>4.3economic aspect of project</li> <li>4.3.1 causes of economic analysis of project</li> <li>4.4 social aspect of project</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in	Goodman LJ and Love RN (Eds) (1980). Project Planning and Management. (pp 25-40) DFID (1995) Stackholder Participation and Analysis (pp 15-30)

		4.5 institutional/organizational aspect of project	discussions	
		4.6 market/commercial aspect of project		
		4.7 environmental aspect of project		
9 <sup>th</sup> -11 <sup>th</sup>	12	Chapter 5. Project Feasibility Analysis and Sustainability 5.1project pre-feasibility vs feasibility study (importance, and difference) 5.2 Project Feasibility 5.2.1 Why project profitability is measured? 5.2.2 undiscounted approach of measuring project feasibility 5.2.3 discounted approach of measuring project worth	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Goodman LJ and Love RN (Eds) (1980). Project Planning and Management. (pp 45-60) DFID (1995) Stackholder Participation and Analysis (33- 52)
		<ul> <li>5.2.4 Cost – Benefit Analysis of project</li> <li>5.3. Project Sustainability</li> <li>5.4 Why do projects succeed or fail?</li> <li>5.5 financial analysis of project</li> <li>5.5.1 Credit worthiness analysis/ratios</li> <li>5.5.2 income ratios/analysis of project</li> <li>5.5.3 efficiency ratios/ analysis of project</li> </ul>		
12 <sup>th</sup> -13 <sup>th</sup>	6	<ul> <li>Chapter 6: project Uncertainty, Sensitivity &amp; Risk Analysis</li> <li>6.1 What is project risk? How to mitigate it?</li> <li>6.2 project risk vs uncertainty</li> <li>6.3 Quantitative Risk Analysis</li> <li>6.4 Sensitivity Analysis and switching value</li> <li>6.5 importance's of sensitivity analysis of project</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Goodman LJ and Love RN (Eds) (1980). Project Planning and Management. (pp 45-60) DFID (1995) Stackholder Participation and Analysis (33- 52)
14 <sup>th</sup> -16 <sup>th</sup>	12	<ul> <li>Chapter 7. Proposal Writing and Fund Raising</li> <li>7.1. project Proposal writing</li> <li>7.1.1 elements of project proposal</li> <li>7.1.2 importance's of project proposal</li> <li>7.2. Fund raising</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Goodman LJ and Love RN (Eds) (1980). Project Planning and Management.(pp 65-75) DFID (1995) Stackholder Participation and Analysis (pp 50-750

## LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

- Lecture
- **Reflections:** Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.
- **Homework:** Homework assignments will be given to help reinforce some topics covered and not covered in class individually and in group.

#### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, individual and group assignments, quizzes and final exam.

SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Test	8%
Quiz	7%
Individual Assignment	10%
Mid Exam	25%
Final Exam	50%
Total	100%

Note: Grading System: As per University's regulation

Course Policy: All students are expected to abide by the code of conduct of students (article 166 and 166.1.1, of The Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

### Reference

Goodman LJ and Love RN (Eds) (1980). Project Planning and Management. An integrated approach,

Pergamon policy studies on socio-economic development, oxford. Pergamon Press.

DFID (1995) Stackholder Participation and Analysis, London: Social development division DFID.

Cusworth J W and Frank T R (1993) Managing projects in developing countries, Harlow: Addison Wesley Longman

Bellas, A. and Zerbe, R. O., 2000. A primer for Cost benefits Analysis. Harper Collins, NY.

Belli, P., 1996. Hand Book on Economic Analysis of Investment Projects. World Bank, Operations Policy Department.

Chandra, P., 1980. Projects: Preparation, Appraisal and Implementation. Tata McGraw-Hill publishing company Limited, New Delhi.

Gittinger, J.P., 1982. Economic Analysis of Agricultural Projects, The Johns Hopkins University Press, 2nd edition, Baltimore and London.

Kanshahu A.I., 1996. Planning and Implementing Sustainable Projects in Developing Countries: theory, practice and economics. AgBe Publishing, Holland.

Keeling, Ralph, 2000, Project Management: An International Perspective. Macmillan

M. Petel, Bharesh, 2000, Project Management: Strategic Financial Planning, Evaluation and Control.

Sigh, Narendra, 1999, Project Management and Control. Himalaya Publishing House.

Spinner, M. Pete, 1997, Project Management Principles and Practices. Prentice hall, Columbus Ohio.

Square, L. and van der Tak, H.G., 1992. Economic Analysis of Projects. 7th ed. The Johns Hopkins University Press, Baltimore and London.

Gittinger, J.P., 1982. Economic Analysis of Agricultural Projects, The Johns Hopkins University Press, 2nd edition, Baltimore and London.

M. Petel, Bharesh, 2000, Project Management: Strategic Financial Planning, Evaluation and Control.

VLIR PCM, 2002. Project Cycle Management. General VLIR Manual, July 2002, Peace Corps 2003. Approved by:

Name Course Instructor /Tutor

Name Course Chair

Name Program Manager

Signature

Signature

Signature



#### **BAHIR DAR UNIVERSITY**

### INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES

Program	Disaster H	Disaster Risk Management and Sustainable Development					
Courses code	Drms4038	3			-		
Courses Title	Emergeno	cy Logistics Ma	nage	ment			
Degree Program	BSc. in Di	isaster Risk Ma	nage	ment and Sustair	nable I	Developmen	ıt
Module name	Conceptu	al Understandi	ng of	Disaster Risk Ma	anagei	nent	
Module number	03						
Course chair							
Instructor/Tutor							
ECTS credit (CP)	4						
Contact hours	Lectures	Tutorials seminars	&	Laboratory workshop	&	Home Study	Total
	48	-		-		55	103
Lecture days, hours & room	-						
Tutorial /lab days & hour							
Target group	Students		Ma	nagement and S	Sustaiı	nable Deve	elopment
Year /semester	3 <sup>rd</sup> Year, 2	2 <sup>nd</sup> Semester					
Pre-requisites	None						
Status of the course	Major						
Course Decomintion							

### **Course Description**

The course is intended to provide students with understanding and practical use of subject of logistics and supply chain management in emergency situations. The course will give students fundamental and advanced knowledge about humanitarian logistics and the design, management and measurement of supply chains in the emergency humanitarian context. The course looks at how the different elements of logistics and supply chain are brought together, along with techniques to manage the operational resources and personnel involved that include humanitarian supply chains, warehousing and inventory, procurement, transport, fleet management, cash transfer programming. The purpose of the course is to prepare a humanitarian logistic experts that can handle the flow of emergency supplies (goods and services), storage, packaging, cargo handling, distribution processing, and information processing.

## Objectives

Up on the successful completion of this course the students will be able to;

- Understand logistics processes,
- Examine the humanitarian logistics system and the activities involved in a logistics operation
- Describe the considerations and problem areas of logistics and supply chain management in different types of disasters.

- Outline the humanitarian supply chain management and logistics players and describe the interactions between them.
- Understanding of the relationships between key elements in the supply chain and how to use it in his particular context;
- Understand and describe emergency logistics management in the context of Ethiopia.

# SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READINGS

		DF LECTURE TOPICS, ACTIVITIES A Conceptual focus	Assignment / Task /	Reading
Week	Lecture (hr)		,,	
1-3	9	CHAPTER 1: CONCEPTS AND DEFINITION OF LOGISTICS 1.1 Logistics definition 1.2 Scope of emergency logistics 1.3 Type of logistics 1.4 Aim and function of logistics 1.5 Role logistics –transportation, delivery,	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	R.S. Stephenson, (1993) Logistics module
4-6	6	CHAPTER 2: HUMANITARIAN LOGISTICS AND HUMANITARIAN PRINCIPLES 2.1 Logistics strategy 2.2 Logistics planning 2.3 Major planning areas 2.4 Emergency logistics planning	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	R.S. Stephenson, (1993) Logistics module
7-10	12	<ul> <li>CHAPTER 3: SUPPLY CHAIN AND PHYSICAL DISTRIBUTION</li> <li>MANAGEMENT</li> <li>3.1 Supply chain type of relationship in supply chain,</li> <li>3.2 Logistic trends and supply chain behavior and Supply chain dynamics, supply chain improvement</li> <li>3.3 Physical distribution, physical distribution management, factors of physical distribution</li> <li>3.4 storage/ warehousing and handling systems, need for storage system function and type of warehouses</li> <li>3.6 Inventory management and decisions, reasons for inventory, types of inventories</li> <li>3.7 Procurement and procurement procedure</li> <li>3.8 Transportation and distribution</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	R.S. Stephenson, (1993) Logistics module UN WHO (2001): humanitarian supply management in logistics Elsevier Inc. 2011. Logistics Operations and Management Concepts and Models; <u>Humanitarian Logistics</u> <u>Planning in Disaster</u> <u>Relief Operations</u> , USA
11-12	6	CHAPTER 4: FORECASTING LOGISTICS REQUIREMENTS IN EMERGEENCY MANAGEMENT 4.1 spatial versus temporal demand 4.2 lumpy/irregular versus regular demand	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	

		<ul><li>4.3 forecasting</li><li>4.4 characteristics of emergency supply</li></ul>	
13-16	12	CHAPTER 5: EMERGENCY LOGISTICS MANAGEMENT IN ETHIOPIA 5.1 Decision-making; 5.2 Warehousing –first in-first out 5.3 Transportation 5.4 emergency Preparedness Fund 5.5 Field visit	

## **INSTRUCTIONAL METHODS**

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation, and field work.

### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, individual and group assignments, quizzes and final exam.

### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Test	8%
Quiz	7%
Individual Assignment	10%
Mid Exam	25%
Final Exam	50%
Total	100%

Note: Grading System: As per University's regulation

**Course Policy:** All students are expected to abide by the code of conduct of students (article 166 and 166.1.1, of The Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned

off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

### Reference

- 1. Elsevier Inc. 2011. Logistics Operations and Management Concepts and Models; Humanitarian Logistics Planning in Disaster Relief Operations, USA PP 297-338
- 2. R.S. Stephenson, (1993): Logistics module: disaster management training program
- **3.** UNWHO (2001): humanitarian supply management and logistics in health sector: Washington D.C,
- 4. Emergency Logistics Planning: A Conceptual Framework; Wapee Manopiniwes, Takashi Irohara

Approved by:

Name	Course Instructor /Tutor	Signature
Name	Course chair	Signature
Name	Department head	Signature



## BAHIR DAR UNIVERSITY

INSTITUTE OF DIS	F DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES					
Program	Disaster Risk Management and Sustainable Development					
Courses code	Drms4077					
Courses Title	Senior Re	esearch Project Re	port			
Degree Program	BSc. in Dis	saster Risk Manage	ment and Sustainab	le Developme	ent	
Module name	<b>Research</b> I	Methods and Tools				
Module number	07					
Course chair						
Instructor/Tutor						
ECTS credit (CP)	3					
Contact hours per week	Lectures	Tutorials & seminars	Laboratory workshop	& Home Study	Total	
	-	48		144	162	
Lecture days, hours & room	-					
Tutorial /lab days & hour						
Target group						
Year /semester						
Pre-requisites Senior Research Project Proposal						
Status of the course	Major					

# **Course Description:**

Writing good research report, elements of good research report, formatting, **Course Objectives:** 

The overall objective of this course is to acquaint students in writing viable and sound research proposal using scientific principles of research proposal writing. At the end of the course students will be able to:

- Write good quality research report
- Collect, analyse, and submit complete reports of their senior research projects
- Demonstrate students' analytical and scientific research report
- Writing skills

Duration	Conceptual focus	Mode of Teaching Learning	
	Data collection and	Making Discussion with the	
Week 1-15	analysis	advisor to take comment	
		Making Discussion with the	
Week 2-15	Data interpretation	advisor to take comment	
		Making Discussion with the	
Week 2-15	Writing manuscript	advisor to take comment	
	Submit the first draft to	Making Discussion with the	
Week 10	advisor	advisor to take comment	
	Incorporate the comment by	Making Discussion with the	
Week 1-15	the advisor	advisor to take comment	
	Submit the final copy to the	Making Discussion with the	
Week 15	coordinator	advisor to take comment	
Week 16	Presentation		

# SCHEDULE OF LECTURE TOPICS AND READINGS

# **Assessment Methods**

Assessment Type	Allotted Points	Week
Paper submission	100%	

## **Course Policy**

All students are expected to abide by the code of conduct of students (article 166 and 166.1.1, of The Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned

off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

## **Reference:**

Gustavii, B. (2003). <u>How to write and illustrate a scientific paper</u>. Cambridge University, UK: The Cambridge Press. Approved by:

Name Course Instructor /Tutor

Signature

Name Course chair

Signature

Name Program manager

Signature



**BAHIR DAR UNIVERSITY** INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES Program **Disaster Risk Management and Sustainable Development Courses code** Drms4057 **Courses Title Relief, Rehabilitation and Development Degree Program** BSc. in Disaster Risk Management and Sustainable Development Module name **Disaster & Development** Module number **Course chair** Instructor/Tutor ECTS credit (CP) 05 Laboratory & workshop **Contact hours** Lectures **Tutorials & seminars** Home Study Total **48** 55 103 --Lecture days, hours & room -Tutorial /lab days & hour 4<sup>th</sup> year Disaster Risk Management and Sustainable Development Students Target group 4<sup>th</sup> Year, 2<sup>nd</sup> Semester Year /semester **Pre-requisites** None Status of the course Major

# **Course Description**

Policymakers, donors and humanitarian organizations have been dealing for decades with questions of how to better support vulnerable people affected by recurrent crises and how to create a more unified fit between short-term life-saving interventions and long-term efforts to reduce chronic poverty or vulnerability. Initially, the concept of linking relief, rehabilitation and development (LRRD) has been conceived as a response to the funding gap that was identified between relief interventions and longer-term development operations following disasters. The course attempts to familiarize students with the theory and practice surrounding the links between relief, rehabilitation and development that is short-term relief measures with longer-term development programmes in order to create synergies and provide a more sustainable response to crisis situations responses to disasters and humanitarian emergencies for resilience building. The purpose of the course is to prepare experts that understand disaster as an issue of development and the mismatch between emergency relief and development for resilience.

# **Objectives**

Up on the successful completion of this course the students will be able to;

- Understand disaster as a development problem or gap;
- Describe disaster risk reduction as the concern of development;
- Understand history and concepts of linking relief to development;
- Explain the different approaches to linking relief and development;
- Analyze the challenges and debates of linking relief and development,
- Describe the relief Development continuum and contiguum concepts
- Describe the LRD experiences of Ethiopia;
- Analyze the issue of dependency syndrome in the context of Ethiopia;
- Discuss the importance of targeting and its practice in Ethiopia;

Lecture (hr)		Conceptual focus	Assignment / Task /	Readings
Week 1-3		<ul> <li>CHAPTER 1: NEXIS BETWEEN</li> <li>DEVELOPMENT AND DISASTER RISKS</li> <li>1.1 Disaster as a problem of Development,</li> <li>1.2 Disaster Risk Reduction as a development concern</li> <li>1.3 Disaster risk reduction and SDG Agenda 2030 and beyond;</li> <li>1.4 Mainstreaming Disaster Risk redaction with development planning;</li> </ul>	Listen to a lecture and take notes on the lesson,	Disasters and Development, Disaster Management Training Programme 1994, Tools for Mainstreaming DRR with Development planning, Buchanan- Smith & Maxwell. 1994. 'Linking Relief & Development. An
Week 4-7	12	CHAPTER2. LINKING RELIEF, REHABILITATION AND DEVELOPMENT 2.1 Concepts and History of Linking Relief and Development 2.2. Approaches to LRD ; 3.3 Strategies for Developmental Relief 2.4 Relevance to the LRRD debate 2.5. Useful Frameworks For LRR 2.6. Challenges of Linking Relief, 4. HUMANITARIAN TRENDS AND DILEMMAS DEBATES ON LRD	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	Merging Relief and Development: The Case of Turkana, Merging Relief and Development: The Case of Darfur; Buchanan-Smith & Maxwell. 1994. 'Linking Relief & Development. An Introduction & overview.' IDS Bulletin 25(4):1-18, Linking relief, rehabilitation and development Towards more effective aid Linking Relief and Development: More than old solutions for old problems?
Week 8	3	CHAPTER 3: LINKING RELIEF AND SOCIAL PROTECTION 3.1 Relief and Social protection 3.2 Case studies in Relief and Social protection		Social Protection in Africa: Trends, Challenges and Opportunities
Week 9-14	18	CHAPTER 4: LINKING RELIEF, REHABILITATION AND DEVELOPMENT IN ETHIOPIA 4.1 The history of food aid in Ethiopia 4.2. Types of food aid and Food for Work		Buchanan-Smith & Maxwell. 1994. 'Linking Relief & Development. Haider, H. (2014). Conflict: Topic Guide. Revised edition with B.

# SCHEDULE OF LECTURE TOPICS, ACTIVITIES AND READINGS

		<ul> <li>Development in Ethiopia</li> <li>4.3 Ethiopian Food Security Conditions: Why is famine and hunger so common in Ethiopia?</li> <li>4.4 LRD Approaches in Ethiopia</li> <li>4.5 Food Security Strategy;</li> <li>4.6 The Productive Safety Net Programme (PSNP)</li> <li>4.5 Debates of Dependency Syndrome</li> <li>4.6 LRD and displacement: Case study</li> </ul>		Rohwerder. Birmingham: GSDRC, University of Birmingham
Week 15- 16	6	<ul> <li>CHAPTER 5: TARGETING METHODS AND STRATEGIES</li> <li>5.1. Definitions of targeting;</li> <li>5.2 Reasons for Targeting,</li> <li>5.3. Targeting methods;</li> <li>5.4. Targeting stages;</li> <li>5.5. Information needs in targeting stages;</li> <li>5.6. Advantages and disadvantages of different targeting methods;</li> <li>5.7. Targeting 'errors' and problems;</li> <li>5.8 Causes of targeting error;</li> <li>5.9 Targeting for PSNP: Case Study</li> </ul>		Targeting Ethiopia's Productive Safety Net Programme (PSNP), Kay Sharp, Between Relief and Development: targeting food aid for disaster prevention in Ethiopia
		5.10 Field Work	Report on Ethiopian experience	FWP MERET, EGS, PSNP, Urban Safety Net, Social Protection

### **INSTRUCTIONAL METHODS**

The mode of the delivery of the course includes lecture, questioning and answering, group work, discussion, assignment and presentation, and field work.

### ASSESSMENT METHODS

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, individual and group assignments, quizzes and final exam.

SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Test	8%
Quiz	7%
Individual Assignment	10%
Mid Exam	25%
Final Exam	50%
Total	100%

Note: Grading System: As per University's regulation

**Course Policy:** All students are expected to abide by the code of conduct of students (article 166 and 166.1.1, of The Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

#### References

Federal Emergency Management Agency. (2007, September 11). *Emergency Management Priniciples*. Retrieved from FEMA Higher Education Program: <u>http://training.fema.gov/EMIWeb/edu/emprinciples.asp</u>

- McEntire, D. (2004, June 8). The Status of Emergency Management Theory: Issues, barriers and recommendations for improved scholarship. Retrieved from FEMA Higher Education Program: http://training.fema.gov/EMIWeb/edu/highpapers.asp
- Quarantelli, E. L. (2000). *Emergencies, disasters, and catastrophes are different phenomena*. Retrieved from University of Delaware: http://dspace.udel.edu:8080/dspace/handle/19716/674
- Quarentelli, E. L. (1997). *Research based criteria for evaluating disaster planning and managment.* Retrieved from University of Delaware: http://dspace.udel.edu:8080/dspace/handle/19716/136
- Stehr, S. D. (2007). The Changing Roles and Responsibilities of the Local Emergency Manager: An Empirical Study. *International Journal of Mass Emergencies and Disasters*, 37-55.
- Waugh, W. L., & Tierney, K. (Eds.). (2007). *Emergency Management: Principles and practices for local government*. Washington, DC: ICMA Press.
- FERGUSON, Ronald F. and Dickens, William T. (1999) Urban Problems and Community.

## Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Department head

Signature

Signature

Signature



# BAHIR DAR UNIVERSITY Institute of Disaster Risk Management and Food Security Studies

				•		
Program	Disaster R	Disaster Risk Management & Sustainable Development				
Courses code	Drms4063					
Courses Title	Food Safet	y and Hygiene				
Degree Program	BSc. Disas	ter Risk Manager	ment & Sustainabl	e Develop	ment	
Module name	Cross Cut	ting Issues in DRI	M			
Module number	06					
Course Chair						
Instructor/Tutor						
ECTS credit (CP)	3					
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total	
	3	-	-	5	8	
Lecture days, hours & room						
Tutorial /lab days & hour						
Target group						
Year /semester						
Pre-requisites	None					
Status of the course	Major					

### **Course description**

The course is designed to make the students aware of the importance of food safety and the factors which it may affect (contaminate). It is also to provide the important principles of sanitary practices in food hygiene for promotion of health and prevention of food borne disease.

## **Course Objectives:**

Upon successful completion of this course students are expected to:

- Explain the concept of food safety
- Describe the role of micro-organisms in food hygiene
- Explain the principles of food spoilage
- Identify food borne diseases and apply the prevention strategy of food borne diseases
- Explain food safety strategies
- Perform Inspection of food and Drinking Service Establishments on the principle of HACCP
- Perform food sampling techniques and methods of laboratory analysis

	Tentative schedule for the course						
Week	Lecture	Conceptual focus	Assignment / Task /	Readin			
	(hr)			gs			
		1. Introduction	Listen to a lecture and take notes on the				
W1-	4	1.1 Introduction and definitions of terms	lesson, Forward all the confusion or doubts				
2		1.2 Food and microorganisms	trainee may have in relation to the given				
		1.3 Food spoilage	lecture, take part in discussions				
		1.4 Perishable and potentially hazardous food items					
W3-		2. Common Food borne disease and their	Listen to a lecture and take notes on the				
6	8	classification	lesson, Forward all the confusion or doubts				
		2.1 Food infections	trainee may have in relation to the given				
		2.2 Food poisonings	lecture, take part in discussions				
		3. Food Safety Risk analysis	Listen to a lecture and take notes on the	1			
		3.1 Assessment	lesson, Forward all the confusion or doubts				
W7-	6	A. application of HACCP	trainee may have in relation to the given				
9		3.2 Management	lecture, take part in discussions				
		3.3 Communication					
		4. Food sampling techniques and laboratory result	Listen to a lecture and take notes on the				
	6	interpretations	lesson, Forward all the confusion or doubts				
W10		4.1. Significance, type of tests, standards	trainee may have in relation to the given				
-12			lecture, take part in discussions				
		5. Food and drinking establishments	Listen to a lecture and take notes on the				
	8	5.1. Types, Location, design and construction	lesson, Forward all the confusion or doubts				
W13		Sanitary facilities	trainee may have in relation to the given				
-16		5.2 Inspections of food and drinking establishments	lecture, take part in discussions				
		6. National and international food hygiene rules	Listen to a lecture and take notes on the				
		and regulations	lesson, Forward all the confusion or doubts				
		6.1. Practice and personal hygiene of food handles	trainee may have in relation to the given				
		6.2 Globalization and food trade (food additives,	lecture, take part in discussions				
		coloring agents, emulsifiers, acidification, leveling					
		requirements, shelf life determination, genetically					
		modified foods, quarantine procedures)					
		6.3 Emergency food reserve handling					

## LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

- Lecture
- **Reflections:** Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.
- **Homework:** Homework assignments will be given to help reinforce some topics covered and not covered in class individually and in group.

#### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment which comprises relevant tests, assignments; project works, quizzes and final exam.

Activities	Marks
Quiz	7%
Test	8%
Group Assignment and presentation	10%
Mid exam	25%
Final Exam	50%
Total	100%

### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

#### **COURSE POLICY**

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Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date though they are explained at each content of your course guidebook.

Note on class attendance and participation: You are expected to attend class regularly. I will take attendance on random days during the semester to ensure that students are coming to class, and if you miss class repeatedly, your grade will be affected. If you miss more than 15% of the class attendance you will not sit for final exams. Please try to be on time for class. I will not allow you enter if you are late more than five minutes. I will often ask questions during my lectures and active participation in class is essential

Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources (where I provided you to read) may be the subject of assignment or final exam question items. Please follow the instructions indicated at each content of your course guidebook to complete all the assignments provided whether they are to be performed individually or in group.

References

Approved by:

Name Course Instructor /Tutor

Name Course Chair

Name Department Head

Signature

Signature

Signature

BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES						
Program	Disaster F	Risk Managemer	nt and Sustainabl	e Develop	ment	
Courses code	Drms4066					
Courses Title	Peace and	<b>Conflict Mana</b>	gment			
Degree Program	BSc. Disaster Risk Management and Sustainable Development					
Module name	Cross Cut	ting Issues in D	RM			
Module number	06					
Course chair						
Instructor/Tutor						
ECTS credit (CP)						
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total	
	48	-	-			
Lecture days, hours & room						
Tutorial /lab days & hour						
Target group						
Year /semester						
Pre-requisites						
Status of the course	Major					

# **Course description**

The peace and conflict management course is an interdisciplinary course whose aim is to introduce learners from a variety of backgrounds to the analysis of conflict, violence, and peace. This course entails some of the key concepts associated with the work of peacebuilding and conflict resolution which includes conflict, violence, peace, and negative and positive peace. This is followed by the practical approaches that are used in understanding a conflict. It discusses the meaning of conflict analysis and explores key components including profile, causes, actors and dynamics of a conflict. The concept of Conflict Management and related issues will be part of the course. This course explores the meaning of peacebuilding and management and discusses the concept of conflict sensitivity and why this is an important principle of the process of peacebuilding and management. In particular, the issues of governance and peoples' participation and inclusion in peace process as some of the key approaches that can bring about sustainable peace are explored. Moreover, the existing indigenous conflict resolution mechanisms and sustaining of peace will accampany all the chapters mentioned before.

# **Course Objectives:**

Upon completion of this course, you should be able to:

- Discuss the concept of conflict and different types of conflicts.
- Trace some of the causes of conflict such as power, identity, culture, and resources among others.
- Define the concepts of conflict resolution, conflict transformation, and conflict management.
- Identify various types of tools commonly used in conflict analysis.
- Identify the dimensions of peacebuilding and management.
- Explain the importance of indigenous peacebuilding and conflict resolution and third party system
- Conflicts and Peace management in Ethiopia; Historical perspectives

# Tentative schedule for the course

Schedule	Lecture	CONCEPTUAL TOOLS	READINGS
	hour		
		CHAPTER ONE: BASIC CONCEPTS OF	
		PEACE AND CONFLICT	Compiled notes
week 1	1	Concept of peace and peace building	&Power point
		Peace keeping	presentations
		Peace making	
		Peace building	
		Peace enforcement	
week 1 & 2	4	The concept of conflict and conflict management	
		Violence	
		Conflict settlement	
		Conflict prevention	

		Conflict regulation
		Conflict resolution
		Conflict transformation
		CHAPTER TWO : THEORIES OF PEACE AND
		CONFLICT
Week 2 & 3	3	Typologies
Week 3	3	Contending theories and perspectives
		<b>CHAPTER THREE : STRATEGIES OF PEACE</b>
		MAKING
Week 5 & 6	1	Analysis of conflict
		Profiles
		Causes
		Actors
		dynamics
Week 6	3	Conflict cycles
		Dynamics of conflict
Week 6		Actors – Institution, Individuals, and State
		Approaches – Facilitation, Mediation, and Arbitration
		Processes – Negotiations
		CHAPTER FOUR : INDIGENOUS PEACE AND CONFLICT MANAGEMENT
Week 7	3	Understanding of indigenous peace and conflict
WEEK /	5	managemenet systems
Week 8	3	Types
Week 9	3	Experiences
Week 10	3	Challenges
Week 11	3	Fates
Week 12	3	CHAPTER FIVE : CONFLICTS AND PEACE
		MANAGEMENT IN ETHIOPIA; HISTORICAL
		PERSPECTIVES
Week 13	3	Conflicts in Ethiopia
Week 14	3	Peace building in Ethiopia
Week 15	3	Experiences

# LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works

Lecture

Reflections: Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.

Home work: Assignments will be given to help reinforce some topics covered or not covered in class

# **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment (50%) which comprises relevant tests, individual and group assignments, quizzes and final exam.

	-	-	-	-		
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SUMMARI	UL,	ASSION	NIVILINIO,	ILDID,	QUILLS	AND LAAM

Activities	Marks
Test	8%
Quiz	7%
Individual Assignment	10%
Mid Exam	25%
Final Exam	50%
Total	100%

Note: Grading System: As per University's regulation

Course Policy: All students are expected to abide by the code of conduct of students (article 166 and 166.1.1, of The Senate Legislation of Bahir Dar University May 09, 2019) throughout this course. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to concerned bodies for action. If you need to read it, you can get a copy (to be copied by yourself) of it from your academic advisor. Class activities will vary day to day, ranging from lectures to discussions. Students will be active participants in the course. You need to ask questions and raise issues. I expect you to do all the assignments you are supposed to accomplish. You are required to submit and present the assignments provided according to the time table indicated. I'll give out the directions, if I find it necessary, for the assignments one week prior to their due date. Note on class attendance and participation: You are expected to attend class regularly. I will take attendance during the period of time this course is offered. If you miss more than 85% of the class attendance you will not sit for final exams. Please try to be on time for class. Cell phones MUST be turned off before entering the class as they are disruptive and annoying to all of us in the class. So please make sure your cell phone is turned off before entering the class. You are responsible for all class announcements and changes. All issues discussed in class or derived from other sources may be the subject of assignment or final exam question items.

## **Recommended Reading:**

Approved by:

Name	<b>Course Instructor /Tutor</b>	Signature	Date
Name	Course chair	Signature	Date
Name	Program manager	Signature	Date



# **BAHIR DAR UNIVERSITY** Institute of Disaster Risk Management and Food Security Studies

D		· 1 N/		1 4			
Program		Disaster Risk Management & Sustainable Development					
Courses code	Drms4064	Drms4064					
Courses Title	Occupation	nal Safety and He	alth				
Degree Program	BSc. Disast	ter Risk Managen	nent & Sustainable	Developn	nent		
Module name	Cross Cutt	ing Issues					
Module number	06						
Course Chair	Yosef Tam	iru					
Instructor/Tutor	Yidnekach	ew Merkeb(MPH	)				
ECTS credit (CP)	3						
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total		
	3	-	-	5	8		
Lecture days, hours & room							
Tutorial /lab days & hour							
Target group	4 <sup>th</sup> Year DRMSD Students.						
Year /semester	Year 4 Semester II						
Pre-requisites	None						
Status of the course	Major						

## **Course description**

The course is designed to equip the students with knowledge and skill in relation to Occupational Health & Safety & apply their knowledge and skills of hazard identification and prevention principles and techniques, related health effects, methods of recognition, evaluation, control and prevention of occupational hazards to protect the workforces from exposure and effects of different occupational hazards in their work place.

## **Course Objectives:**

Upon successful completion of this course students are expected to:

- Describe the concepts of Occupational health & Safety
- Describe the types and characteristics of different occupational hazards that can affect workers health in the work place.
- Explain about the health effects of exposure to different occupational hazards.
- Develop skills to identify, characterize and control different occupational hazards in the work place that can be applicable in Ethiopian situation.

- Identify the major causes and sources of different occupational hazards.
- Explain basic principles of occupational health & safety
- Distinguish the different personal protective equipments
- Demonstrate first aid for any occupational injuries

Week	Lecture	Conceptual focus	Assignment / Task /	Readin
	(hr)			gs
		2. Introduction	Listen to a lecture and take notes on	
$\mathbf{W}$	4	1.1 concepts and definitions	the lesson, Forward all the	
1		1.2 Historical background of occupational	confusion or doubts trainee may	
-		health	have in relation to the given lecture,	
2		1.3 Occupational health and development	take part in discussions	
		1.4 Scope of occupational health and safety		
		1.5 Elements of the work environment		
W3-		2. Occupational hazards	Listen to a lecture and take notes on	
6	8	2.1 Introduction	the lesson, Forward all the	
		2.2 Classification of Occupational hazards	confusion or doubts trainee may	
		Physical hazards	have in relation to the given lecture,	
		Biological hazard	take part in discussions	
		Chemical hazard	*	
		Ergonomic hazard		
		Psychosocial hazard		
		Specific safety issue hazards		
		3. Occupational Safety	Listen to a lecture and take notes on	
		3.1. Safety management System	the lesson, Forward all the	
W7-	6	3.2 Elements of safety management system	confusion or doubts trainee may	
9		3.3 Principles of safety management	have in relation to the given lecture,	
		system	take part in discussions	
		3.4 Occupation specific safety		
		Construction safety		
		Industry safety		
		Transport safety		
		Fire safety		
		4. Ergonomics	Listen to a lecture and take notes on	
	6	4.1. Definition	the lesson, Forward all the	
W10		4.2 Typical Ergonomic Injuries	confusion or doubts trainee may	
-12		4.3 Impact of Injury on Industries	have in relation to the given lecture,	
		4.4 Understanding Ergonomics at Work	take part in discussions	
		5. Occupational Health and Safety	Listen to a lecture and take notes on	
	8	Management	the lesson, Forward all the	
W13		5.1. Personal protective equipment	confusion or doubts trainee may	
-16		5.2. First aid	have in relation to the given lecture,	
			take part in discussions	

## Tentative schedule for the course

# LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

- Lecture
- **Reflections:** Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.
- **Homework:** Homework assignments will be given to help reinforce some topics covered and not covered in class individually and in group.

## **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment which comprises relevant tests, assignments; project works, quizzes and final exam.

### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Quiz	7%
Test	8%
Group Assignment and presentation	10%
Mid exam	25%
Final Exam	50%
Total	100%

Note: Grading: As per University's regulation

### **COURSE POLICY**

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# References

- 1. Friend, Mark A.(2007) Fundamentals of occupational safety and health
- 2. Benjamin O. Alli(2008) Fundamentals principles of occupational health and safety
- 3. OSHA field safety and health manual,2011
- 4. Amit Bhattacharya and James D. McGlothlin(2012) Occupational ergonomics Theory and applications
- 5. W.S. Marras and W. Karwowski(2006) Fundamentals and assessment tools for occupational ergonomics.
- 6. Stephan Konz and Steven Jhonson(2008) Work design: occupational ergonomics
- 7. Gudgin Dickson, Eva F. (2013), Personal protective equipment for chemical, biological, and radiological hazards : design, evaluation, and selection
- 8. American red cross society 2nd edition ,standard first aid and personal safety
- 9. British red cross society,9th edition,ABC of first aid
- 10. International federation of red cross and red crescent societies(2016), International first aid and resuscitation guidelines
- 11. American safety and health institute(2008), Basic first aid for the community and workplace

# Approved by:

Name Course Instructor /Tutor

Name Course Chair

Name Department Head

Signature

Signature

Signature



BAHIR DAR UNIVERSITY								
INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES								
Program	Disaster Ri	Disaster Risk Management and Sustainable Development						
Courses Code	Drms4073	~						
Courses Title	Environme	ental and Social Ir	npact Assessment					
Degree Program	BSc. Disast	er Risk Managen	nent & Sustainable	Developr	nent			
Module Name	Research N	<b>Iethods and Tool</b>	S					
Module Number	07							
Course Chair								
Instructor/Tutor								
ECTS Credit (CP)	6							
Contact hours per week	Lectures	Tutorials & seminars	Laboratory & workshop	Home Study	Total			
	48	-	32	82	162			
Lecture days, hours & room								
Tutorial /lab days & hour								
Target group	4 <sup>th</sup> Year DRMSD Students.							
Year /semester	Year 4 Semester II							
Pre-requisites	None							
Status of the course Major								

## **Course Description**

This course is designed to introduce students to what ESIA is all about in general sense, its historical development, and institutional, legal and organizational setup. And it explores the concern and the basis of ESIA to the special emphasis of environmental deterioration due to projects in an area. It is also designed to help students describe environmental management by applying ESIA rules and principles for proposed projects mandatory to ESIA in different discipline and the role of different actors in ESIA process. The process of ESIA in Ethiopia will be understood.

## **Course Objectives:**

Upon successful completion of this course students are expected to:

- Understand the basic concept of ESIA
- 4 Describe the key steps of environmental and Social impact assessment
- 4 Understand the foundations of environmental and Social impact assessment
- **4** Explain the major tools of ESIA
- Analyze the relevance of mainstreaming environmental impact and mitigation measures in development projects

# TENTATIVE SCHEDULE FOR THE COURSE

Week	Lectu	Conceptual focus	Assignment / Task /	Readings
	re			
1 and 2	(hr) 6	<ol> <li>Introduction</li> <li>Introduction</li> <li>Historical development of ESIA</li> <li>Purpose and aims of ESIA</li> <li>Why ESIA is important</li> <li>What are the aims and objectives of ESIA?</li> <li>Typology of environmental impacts</li> <li>Guiding principles of ESIA good practice</li> </ol>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	(UNEP), (2002). Environmental Impact Assessment Training Resource Manual. (pp 101-131) Overview of Environmental Impact Assessment in Ethiopia. (pp 3-15)
3 and 4	6	<ul> <li>2. Laws, Policy and Institutional Arrangements</li> <li>2.8 Introduction</li> <li>2.9 Legal and policy context in Ethiopia</li> <li>2.10Principles for a Functional ESIA System</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	(UNEP), (2002). Environmental Impact Assessment Training Resource Manual. (pp 133-158) Overview of Environmental Impact Assessment in Ethiopia. (pp 20-45)
5	3	<ul> <li>3. Screening of ESIA</li> <li>3.6 Pre-screening consultation</li> <li>3.7 Screening procedure</li> <li>3.8 Case study on screening</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	(UNEP), (2002). Environmental Impact Assessment Training Resource Manual. (pp 189-225)
6	6	<ul> <li>4. Scoping of ESIA</li> <li>4.1 Purpose of scoping</li> <li>4.2 Approaches to scoping</li> <li>4.3 Scoping Methods</li> <li>4.4 Scoping reports and ESIA Terms of Reference</li> </ul>		
7 and 8	6	<ul> <li>Case study(field visit)for scoping</li> <li>4.5. Exercises/discussion: Case study on sample project impact</li> <li>4.6. Example:Hotel,factory water(irrigation project), population, cultural,</li> </ul>	Field visit and report writing	

		Field visit to project mandatory to ESIA which is on construction or operation, Scoping report and TOR development exercising		
9 and 10	6	<ul> <li>6. Public Involvement</li> <li>6.1 Concepts Public Involvement</li> <li>6.2 Principles of public involvement</li> <li>6.3 Scope of involvement</li> <li>6.4 Public involvement in practice</li> <li>6.5 Planning a Public Involvement Program</li> <li>6.6 Public Involvement Techniques</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	(UNEP), (2002). Environmental Impact Assessment Training Resource Manual. (pp 159-187)
11 and 12	6	<ul> <li>7. Impact Analysis</li> <li>7.1 Impact Identification</li> <li>7.2 Impact Analysis/ Prediction</li> <li>7.3 Characteristics of Environmental Impacts</li> <li>7.4 Social Impact Assessment</li> <li>7.5 Evaluation of impact significance</li> <li>7.6 Significance Criteria</li> <li>7.7 Probability and Acceptance of Risk</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	(UNEP), (2002). Environmental Impact Assessment Training Resource Manual. (pp 253-300)
13 and 14	6	<ul> <li>8. Mitigation and Impact Management</li> <li>8.1 Link between ESIA process and Mitigation</li> <li>8.2 ESIA stage for considering mitigation measures</li> <li>8.3 Main Elements of Mitigation</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	(UNEP), (2002). Environmental Impact Assessment Training Resource Manual. (pp 303-320)
15	3	<ul> <li>9. ESIA Reporting</li> <li>9.1 Introduction</li> <li>9.2 Typical Elements of an ESIA Report</li> <li>9.3 Shortcomings encountered in Preparing ESIA Reports</li> <li>9.4 Guidelines for effective ESIA report preparation and production</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	(UNEP), (2002). Environmental Impact Assessment Training Resource Manual. (pp 329-340)

16	3	<ul> <li>10. Reviewing of ESIA</li> <li>10.1 Role and Purpose of the ESIA Review Process</li> <li>10.2 Need for a Systematic Approach</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given	(UNEP), (2002). Environmental Impact Assessment Training Resource Manual.
		<ul><li>10.3 Procedural Aspects</li><li>10.4 Main Steps in the ESIA Review</li><li>10.5 Carrying out the review</li><li>10.6 Procedures for Evaluating ESIA Reports</li></ul>	lecture, take part in discussions	(pp 349-380)
3	5	<ul> <li>11. Decision Making of ESIA</li> <li>11.1 Role of the Decision-makers</li> <li>11.2 ESIA as part of the Decision-making Process</li> <li>11.3 Responsibility of the Decision-Makers</li> </ul>	Listen to a lecture and take notes on the lesson, Forward all the confusion or doubts trainee may have in relation to the given lecture, take part in discussions	(UNEP), (2002). Environmental Impact Assessment Training Resource Manual. (pp 383-401)
3	6	<ul> <li>12. Implementation and Follow Up</li> <li>12.1 Key Objectives of ESIA implementation and follow up</li> <li>12.2 Tools for Environmental Management and Performance Review</li> <li>12.3 Monitoring</li> <li>12.4 Environmental Auditing</li> <li>12.5 Evaluation of ESIA Effectiveness and Performance</li> </ul>		(UNEP), (2002). Environmental Impact Assessment Training Resource Manual. (pp 403-437) Overview of Environmental Impact Assessment in Ethiopia. (pp 50-75)

## LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

- Lecture
- Reflections: Keep a weekly written reflection of your reactions, questions about the readings and discussions in class.
- Homework: Homework assignments will be given to help reinforce some topics covered and not covered in class individually and in group.

## ASSESSMENT METHODS

Evaluation will be carried out based on continuous assessment which comprises relevant tests, assignments; project works, quizzes and final exam.

Activities	Marks
Quiz	7%
Test	8%
Group Assignment and presentation	10%
Mid exam	25%
Final Exam	50%
Total	100%

### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Note: Grading: As per University's regulation

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#### REFERENCES

United Nations Environment Programme (UNEP), (2002). Environmental Impact Assessment

Training Resource Manual.

A review of the application of Environmental Impact Assessment in Selected African Countries. Economic Commission of Africa, 2005.

Overview of Environmental Impact Assessment in Ethiopia. Gaps and Challenges, 2008.

327

Weathering the Storm: Participatory risk assessment for informal settlements: Disaster Mitigation for Sustainable Livelihoods Programme, 2008.

Risk Management Training Handbook, 2010. Bureau of Strategic Planning.

Facing Global Environmental Change. Environmental, Human, Energy, Food, Health and Water Security Concepts, 2009.

## Approved by:

Name Course Instructor /Tutor

Name Course chair

Signature

Signature

Name Program manager

Signature



Bahir Dar University

Institute of Disaster Risk Management and Food Security Studies

Program	Disaster Risk Management and Sustainable Development
Courses code	Drms4053
Courses Title	Disaster Risk Governance & Policy
Course chair	
Instructor/Tutor	
Credit	3
Lecture days, hours & room	
Target group	4 <sup>th</sup> Year 2nd Semester
Status of the course	Compulsory

#### **Course description**

The nature of our modern world means shocks, stresses and crisis brought about by the interaction between climate change, ecosystem fragility, unplanned urbanization, political or financial instability reverberate globally. Though building resilience and promoting disaster risk reduction is a collective responsibility and challenge which calls for coordinated actions, resilience can be created by communities, individuals, institutions, and organizations through the facilitation of good disaster risk governance and effective disaster risk management policy both at global and national levels. This course discusses the concept of

governance and public policy for promoting Community Resilience from a general perspective. The main topics to be covered in this course include the concept of Policy, Strategy and decision. The course helps students to explore the role of government in formulation of policies, strategies and practices related to prevention, preparedness, mitigation, response, recovery, and rehabilitation. Governance structures, laws, policies, plans and regulations and promoting disaster resilient communities in Ethiopia will be explored.

#### **Course Objectives:**

Upon successful completion of this course students are expected to:

- Understand global, regional and national disaster risk governance
- Understand the basic idea of public policy,
- Understand the role of governance in policy formulation and implementation at national and regional levels.
- Understand the Global Disaster Risk Reduction Frameworks from Yokohama to Sendai:
- Explain disaster risk reduction and management policies and strategies at global and regional levels
- Understand and explain disaster risk reduction and management policies and strategies in Ethiopia.
- Understand why disaster risk management policy fails

Week	Lectur e (hr)	Conceptual focus	Assignment / Task /	Readings
1&2	12	Chapter One: Governance and Policy for Disaster Risk Management1.1. concepts and definitions to Governance1.2 Development of Disaster Risk Governance1.3 Good Governance and Disaster Risk Management1.3 Core Principles of Good Governance,1.4 Mainstreaming of DRR into the governance system	Active participation during lecturing, group discussion, take notes from lecture and assignment presentation	Sendai Framewor k for Disaster Risk Reduction 2015-2030
		<ul> <li>CAHPTER TWO: Analysis of governance for disaster risk reduction and climate change adaptation</li> <li>2.1 Global level architecture</li> <li>2,2National Level Architecture</li> </ul>		
1&2	12	Chapter II: Introduction to Public Policy 2.1 Concepts and definitions of public policy 2.2 Policy Features 2.3 Reasons for Policy Formulation 2.4 Policy Implementation 2.5 Policy Analysis and Evaluation 2.6 Fiscal and Monetary 2.7 Policy and Strategy	Listen to a lecture and take notes on the lesson, take part in discussions	HFA 2005-2015
4	6	Chapter Three: Global Disaster Risk Management Strategies and Frameworks 2.1 The International Decade for Natural Disaster	Listen to a lecture and t Active participation during	Cours e materi

		Reduction 2.2. The United Nations International Strategy for Disaster Risk Reduction (ISDR) 2.3 Major DRR International Frameworks and Initiatives Yokohama Strategy and Plan of Action for a Safer World The Hyogo Framework for Action (HFA)	lecturing, group discussion, take notes from lecture and assignment presentation	als
		The Global Facility for Disaster Risk Reduction and Recovery		
5	6	Chapter Four: Regional DRR Strategies and Frameworks, Particularly Africa	Active participation and assignment	
		<ul><li>4.1 African Disaster Risk Management</li><li>Initiatives</li><li>4.2 Sub Regional DRR Frameworks</li></ul>	presentation	
		Chapter Five: Disaster Risk Management		
6 &7	18	Governance in Ethiopia 5.1 Disaster Risk Management Institutions 5.2 Disaster Risk Management Policies and Strategies 5.3 Policies and strategies important to disaster risk management in Ethiopia; 5.4 success and failure of DRM policy		
8		<ul> <li>CHAPTER Six: disaster Risk Management</li> <li>Polices, Strategies and its Practice in Ethiopia</li> <li>6.1 Humanitarian Governance in Ethiopia</li> <li>6.2 The role of civil Society Organizations in</li> <li>Ethiopia;</li> <li>6.3 Humanitarian governance and the future of</li> <li>disaster risk management in Ethiopia</li> </ul>	Discussions	Discus sions

## LEARNING AND TEACHING MEETHODS

The mode of delivery of the course will be lecture, discussions, questioning and answering, reading assignments, individual and group works.

**Lecture; Reflections:** Keep a weekly written reflection of your reactions, questions about the readings and discussions in class; **Assignments:** Homework assignments will be given to help reinforce some topics covered and not covered in class individually and in group.

#### **ASSESSMENT METHODS**

Evaluation will be carried out based on continuous assessment which comprises relevant tests,

assignments; project works, quizzes and final exam.

### SUMMARY OF ASSIGNMENTS, TESTS, QUIZES AND EXAM

Activities	Marks
Quiz	7%
Test	8%
Group Assignment and presentation	10%
Mid exam	25%
Final Exam	50%
Total	100%

Note: Grading: As per University's regulation

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#### Reference

- Transitional Government of Ethiopia, National Policy on Disaster Prevention and Management (NPDPM), September 1993 Transitional Government of Ethiopia, Directives for Disaster Prevention & management, October 1993.
- FDRE National Policy And Strategy on Disaster Risk Management, July 2013, Addis Ababa
- FDRE Disaster risk Management Strategic Program and Investment Framework (DRM-SPIF), Ministry of Agriculture (Disaster Risk Management & Food Security Sector)
- The Sendai Frame work for Disaster Risk Reduction 2015-2030, 18 March 2015, Sendai, Japan; http
- The Hyogo Framework for Action 2005-2015: Building Resilience of Nations and Communities to Disaster, and the Sendai Framework for DRR 2015-2030, 18 March 2015,
- Africa Regional Strategy for Disaster Risk Reduction (OAU, 2004),
- Program of Action for the Implementation of the Africa Strategy for Disaster Risk Reduction -2005-210 (NEPAD, 2004b).
- FDRE Five-Year Growth and Transformation Plan (FYGTP) for 2010/11-2014/15;

- The Ethiopian Climate Change National Adaptation Program of Action (NEPA) (June 2007);
- The Food Security Strategy (FSS) (FDRE, 1996; FDRE, 2002), that seeks to attain food security for an estimated population of five to ten million people who are either chronically food insecure or who would be affected by food shortages in the case of drought;
- The productive Safety net program that targets communities in drought prone regions in terms of grants to the regions to be used for enhanced agricultural production packages (seeds and extension), small-scale irrigation and water harvesting, and voluntary resettlement out food insecure areas appeared to have benefited millions of people over the past five years.
- The Agricultural Development-Led Industrial-ization (ADLI) strategy aimed at diffusing agricultural technology, the Participatory Demonstration and Training Extension System, dubbed PADETES with a massive extension program (FDRE, 1992).

<b>Approved by:</b> Tarekegn Ayalew										
Name, Course Instructor /T	Signature	Signature								
<u>Birhanu Sisay (PhD)</u> Name Course Chair							Signature			
Adey Belete										
INSTITUTE OF DIS	BAHIR DAR UNIVERSITY INSTITUTE OF DISASTER RISK MANAGEMENT AND FOOD SECURITY STUDIES									
Program	Disaster R	isk Manageme	ent and	l Sustainable Dev	velopn	nent				
Courses code	Drms4078									
Courses Title	Senior Res	search Project	Semi	inar						
Degree Program	BSc. in Dis	aster Risk Ma	nagen	nent and Sustaina	able D	evelopmen	t			
Module name	<b>Research</b> N	Methods and T	Tools							
Module number	07									
Course chair										
Instructor/Tutor										
ECTS credit (CP)	6									
Contact hours per week	Lectures	Laboratory workshop	&	Home Study	Total					
	-	48				144	162			
Lecture days, hours & room	-									
Tutorial /lab days & hour										

Target group	
Year /semester	
Pre-requisites	Senior Research Project Report
Status of the course	Major

## **Course Description:**

Writing good research report, elements of good research report, formatting,

# **Course Objectives:**

The overall objective of this course is to acquaint students in writing viable and sound research proposal using scientific principles of research proposal writing.

At the end of the course students will be able to:

- Write good quality research report
- Collect, analyze, and submit complete reports of their senior research projects
- Demonstrate students' analytical and scientific research report Writing skills

## Tentative schedule for the course

Duration	Conceptual focus	Assignment / Task /	Readings
	Presentation and panel	Student contact with his/her	
	assessment	respective advisor and take	
		comments on PPT preparation	

# **ASSESSMENT METHODS**

Type of assessment	Allotted point	Week
Presentation and Panel assessment	100	16

Note: Grading: As per University's regulation

# **Course Policy**

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#### **Reference:**

*Gustavii, B. (2003).* <u>How to write and illustrate a scientific paper</u>. Cambridge University, UK: *The Cambridge Press.* Approved by:

Name Course Instructor /Tutor

Name Course chair

Name Program manager

Signature

Signature

Signature



# BAHIR DAR UNIVERSITY Institute of Disaster Risk Management and Food Security Studies Department of Disaster Risk Management & Sustainable Development

# **1.** Course Information

Course Title	Entrepreneurship							
Course Code	MGMT 1012	MGMT 1012						
Credit Hrs./ ECTS	Cr Hrs=3	Cr Hrs=3 L=3 T=0 P=0 H=7 Cp=5						
Contact Hrs.	3 Lecture Hour	3 Lecture Hours						
Semester	One							
Year	One							
Pre-requisites	None							
Target Group	First year stu	First year students: Social Science and Law						

# 2. Course Description

This interdisciplinary course is designed to introduce students the meaning and concept of entreprene innovation and their manageable processes that can be applied across careers and work settings. It fo entrepreneurial attitude and behaviour that will lead to creative solution within community and organizatic The Course topics include the history of entrepreneurship, the role of entrepreneurs in the globalized identification of entrepreneurial opportunities. The development of a business ideas, products and servic developing new ventures, the examination of feasibility studies and the social and ethical implications o are incorporated. Besides, issues related to starting and financing a new venture are included. Finally, transition and sustainability of the venture are considered. And forms of business organizations, leg frameworks of governing the whole system are also encompassed in the course syllabus.

# **3.** Objective of the Course

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

- Define entrepreneurship within the context of society
- Identify business opportunities
- Prepare business plan
- Distinguish forms of business ownership
- Comprehend intellectual property rights in business practices
- Define basic marketing concepts
- Formulate context-based marketing strategies
- Identify and evaluate sources of financing new ventures
- Manage business growth and transition
- Practice ethical business with all stakeholders

# 4. Syllabus Components

<b>4.1.</b> C	4.1. Course Contents, Methods & strategies, and learning outcomes				
4.1. C Tim e Wee k 1& 2	ourse Contents, Methods & strategies, and         Content & sub-contents         Chapter 1: What is Entrepreneurship         1.1. Definition and philosophy of         Entrepreneurship Vs Entrepreneurs         1.1.1. Historical origin of         entrepreneurship         1.2.Type of Entrepreneurs         1.3. Role within the economy         1.4.Entrepreneurial Competence and         Environment         1.4.1. Entrepreneurial Mind-set         1.4.2. Demographic Factors         1.4.3. Entrepreneurial Environment         1.5. Entrepreneurship, creativity and	<ul> <li>d learning outco</li> <li>Methods and Strategies</li> <li>Brain storming</li> <li>Interactive Lecture</li> <li>group discussion and reflection</li> </ul>	<ul> <li>Students Task</li> <li>Define the term entrepreneursh ip and entrepreneur</li> <li>Discuss the role of entrepreneursh ip within the economy</li> <li>Explain the entrepreneurial competences</li> </ul>	Learning Outcomes: At the end of this chapter students will be able to: • Define the term entrepreneur ship and entrepreneur • Identify types of entrepreneur • Recognize the role of entrepreneur ship in the economy • Analyze the entrepreneur	
Wee k 3 - 5	innovation <b>Chapter 2: Business Idea Development</b> 2.1. Opportunity Identification and Evaluation 2.2. Idea Development 2.2.1 Business Idea Identification 2.2.2 Sources of Business Ideas 2.2.3 Methods for generating Business Ideas 2.3. The Concept of Business Planning 2.4. Business Feasibility 2.5. The Business plan 2.6.Contents of business Plan 2.7. Developing a business plan	<ul> <li>Brain storming</li> <li>Interactive Lecture         <ul> <li>group discussion and reflection</li> </ul> </li> </ul>	<ul> <li>Discuss business opportunities in the environment</li> <li>Generate business idea</li> <li>Synthesize the components of business plan</li> <li>Develop business plan</li> </ul>	<ul> <li>entrepreneur ial competences</li> <li>Differentiate the term creativity and innovation</li> <li>Identify opportunity in the environment</li> <li>Evaluate the opportunities in the environment</li> <li>Generate business idea</li> <li>Explai n the concept of business planning</li> </ul>	

				• Identify components of business plan Develop business plan
Wee k 6&7	Chapter 3:Business Formation 3.1. The Concept of Business Development 3.2. Forms of Business (a short explanation) 3.3. Definition of SMES and role of SMEs 3.4. Setting up small scale business 3.5. Business failure and success factors. 3.5.1 Problems of small scale business in Ethiopia 3.6 Organizational structure and entrepreneurial team formation 3.7. Forms of business organizations	<ul> <li>Interac tive Lectur e,</li> <li>Group discuss ion</li> </ul>	<ul> <li>Discuss the concept of business development</li> <li>Brainstorm the importance of SMEs</li> <li>Discuss the failure and success factors of SMEs</li> </ul>	<ul> <li>Explain the concept of business development</li> <li>Identify the forms of business ownership</li> <li>Define SMEs</li> <li>Analyze the importance of SMEs</li> <li>Set Up small scale business</li> <li>List role of SMEs</li> <li>Distingui sh the failure and success factors of SMEs</li> <li>Identify the problem of small scale business in Ethiopia</li> <li>Develop organizational culture</li> </ul>
Wee ks 8&9	Chapter 4: Product or Service Development 4.1. The Concept of product or service technology 4.2. Product or service development Process 4.3 Legal and regulatory frameworks 4.4 Intellectual Property Protect 4.4.1 Patent	<ul> <li>Interactive Lecture,</li> <li>Group discussi on and reflectio n</li> </ul>	<ul> <li>Describe the concept of product and services</li> <li>Analyze Product or service process</li> <li>Recognize</li> </ul>	<ul> <li>Describe the concept of product and services</li> <li>List product or service development process</li> <li>Discuss the</li> </ul>

	4.4.2 Trademarks 4.4.3 Copyrighting		<ul> <li>legal and regulatory frameworks</li> <li>Describe intellectual property protection</li> </ul>	intellectual property protection
Wee ks 10- 12	Chapter 5: Marketing 5.1.The Concept and philosophy of marketing 5.2. Marketing Mix and Strategies 5.3 Marketing Information System 5.3.1 Marketing intelligence 5.3.2 Marketing research 5.5. Competitive analysis 5.6 Selling and Customer Service	<ul> <li>Interactive Lecture,</li> <li>Group discussion and reflection</li> </ul>	<ul> <li>Define marketing concept</li> <li>Discuss marketing mix strategies</li> <li>Differentiate components of marketing information system</li> <li>Explain competitive environment</li> </ul>	<ul> <li>Define marketing</li> <li>Identify Marketing mix and strategies</li> <li>Analyze components of marketing information system</li> <li>Explain competitive environment</li> <li>Describe</li> <li>customer service</li> <li>and selling</li> <li>process</li> </ul>
Wee ks 13&1 4	Chapter 6: Financing the New Venture 6.1 Overview of Business Financing 6.2 Source of financing 6.2.1 Equity financing 6.2.2 Debt financing 6.2.2.1 Trade credit 6.2.2.2 Lease financing 6.3 Traditional Financing (Equib/Edir, etc.) 6.4 Crowd Funding 6.5 Micro finance in Ethiopia	<ul> <li>Interactive Lecture,</li> <li>Group discussion and reflection</li> </ul>	<ul> <li>Discuss business financing</li> <li>Identify the sources of finance</li> <li>Explore traditional financing techniques</li> <li>Aware about crowd funding</li> <li>Examine Ethiopian micro finance system</li> </ul>	<ul> <li>Know business financing</li> <li>Identify the sources of finance</li> <li>Understand with traditional financing techniques</li> <li>Familiarize with crowd funding</li> <li>Know Ethiopian micro finance system</li> </ul>

ks         Transition           15&1         7.1. Manag           6         7.2. New version	ing business growth enture expansion strategies ess Ethics and Social	<ul> <li>Interactive Lecture,</li> <li>Group discussion and reflection</li> </ul>	<ul> <li>Discuss business growth &amp; its management</li> <li>Identify new venture expansion strategies</li> <li>Examine business ethics &amp; social responsibility issues</li> </ul>	<ul> <li>Know how to manage business growth</li> <li>Understand business expansion strategies</li> <li>Know &amp; Internalize business ethics &amp; social responsibiliti es</li> </ul>	
4.2. Assessment S	trategies & Techniques and Co	ourse Policy			
ssm • Mic ent • Fina Tota	<ul> <li>Continues assessment (Tests, Quizzes, Assignments,)</li></ul>				
Cou A student h	A student has to:				
•	- Take all continuous assessments and mid Exam.				
- 0	- Take final examination.				
	- Respect all rules & regulations of the university.  4.3 Instructional Resources				
Module					
Module for the course Entrepreneurship					
Textbooks					
• Hirsh Robert D. and Peters Michael P. "Entrepreneurship" Fifth Edition, Tata McGraw Hill Edition, 2002.					
Further References					
<ul> <li>Justin G. Longenecker and Carlos W. Moore, Small Business Management 12th edition, College Division South Western Publishing Co. Dallas, 2003</li> </ul>					
<ul> <li>Holt David H. "Entrepreneurship – New venture Creation "Eastern Economy Edition, 2000.</li> <li>DonaldF.Kutatko and RichardM.Hodgetts, "Entrepreneurship: A Cotemporary Approach" Fourth Edition.</li> </ul>					
HailayGebretinsae, Entrepreneurship and Small Business Management, 2nd Edition. Approach ". Fourth Edition, the Dryden Press, 1998.					
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# **20 Appendices**

Every curriculum must follow support letters from related professional organizations or sectors. Minutes of the related meetings held at department and academic council levels, survey reports, curriculum workshop minutes, seminar recommendations, need assessments, opinions and suggestions of the subject experts and so on are needed to be attached as appendices to the curriculum.