I. UNIVERSITY VISION, MISSION, GOALS

VISION: ISAT U as a leading science and technology university in Southeast Asia by 2030

MISSION: The University is committed to provide quality and relevant advanced education, higher technological, professional instruction and training arts, sciences, education, architecture, engineering, agriculture, forestry and other field so study, thereby producing locally oriented, globally competitive and eco-friendly human resources. It shall promote research and development programs to advance science and technology and undertake sustainable extension and production activities.

CORE VALUES:
Integrity
Commitment
Accountable
Responsiveness
Excellence

INSTITUTIONAL GOALS:

1. To provide a nurturing environment where academic freedom is guaranteed and respected for the optimum development of human potential.
2. To produce highly competent and eco-friendly graduates, who will become leaders and experts in their fields of specialization.
3. To conduct research towards the advancement of science and technology.
4. To provide extension and production activities for the improvement of the quality of life in the community.
5. To provide effective and efficient delivery of services through responsive management of human, physical, financial, and information resources.

INSTITUTIONAL OUTCOMES/GRADUATE OUTCOMES:

1. ISAT U graduates will demonstrate
   a) love of God and Nation;
   b) expertise in their field of specialization
   c) leadership in the practice of their profession;
   d) social responsiveness, gender sensitivity and respect towards people and environment;
   e) awareness of and concern to domestic and global issues;
   f) ability to communicate effectively and think critically and creatively.

2. ISAT U graduates will work:
   a) With integrity and commitment in their respective fields of endeavors;
   b) Harmoniously in a multi-disciplinary and multi-cultural environment.

3. ISAT U graduates will be engaged in:
   a) a life-long learning by keep abreast with the latest developments in the society
   b) the development and transfer technology.

II. PROGRAM/DEGREE: Bachelor of Science in Computer Science (BSCS)

III. PROGRAM/DEGREE OUTCOMES: The graduates of BSCS have the ability to:

a) articulate and discuss the latest developments in the specific field of practice. (Philippine Qualifications (PQF) level 6 descriptor)
b) effectively communicate in English and Filipino, both orally and in writing.
c) work effectively and collaboratively with a substantial degree of independence in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)
d) act in recognition of professional, social, and ethical responsibility.
e) preserve and promote *"Filipino historical and cultural heritage" (*based on RA 7722)

Common to the discipline (ICT)

f) analyze complex problems and identify and define the computing requirements needed to design an appropriate solution.
g) apply computing and other knowledge domains to address real world problems.
h) design and develop computing solutions using a system level perspective.
i) utilize modern computing tools.

Specific to a sub-discipline and a major

j) apply knowledge of computing fundamentals, knowledge of a computing specialization and mathematics, science and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.
k) identify, analyze, formulate research literature, and solve complex computing problems and requirements reaching substantiated conclusions using fundamental principles of mathematics, computing sciences and relevant domain disciplines.
l) apply mathematical foundations, algorithmic principles and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
m) describe information security issues in relation to the design, development and use of information systems.
n) design and evaluate solutions for complex computing problems, and design and evaluate systems components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.
o) create, select, adapt and apply appropriate techniques, resources and modern computing tools to complex computing activities, with an understanding of the limitations to accomplish a common goal.
p) function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
q) communicate effectively with the computing community and with society at large about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations and give and understand clear instructions.

r) recognize the legal, social, ethical and professional issues involved in the utilization of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices.

IV. Course Number and Title: ICT 116 Human Computer Interaction 1 (None Lab)
V. Course Pre-Requisite: CS 12, Soc Sci 1, ICT 40 (Co – requisite)
VI. Course Credit/Units: 3 units
Contact Hours Per Week: 3
VII. Semester Offered /Academic Year: 1st Semester, AY 2020-2021
VIII. Course Description: This course covers the basics of Human Computer Interaction (HCI). Particularly the design user interfaces based on the capabilities of computer technology and the needs of human factors. This course will also discuss some of the related fields where HCI has been drawn where the students design a user interface for a system and implement its prototype.

IX. Course/Degree Outcomes:

At the end of this course, the students must have:

a) explained the vision, mission and core values of the university.
b) discussed the foundations of human computer interaction (HCI).
c) explained other fields that are related to HCI where it has been drawn and the current research in the field of HCI.
d) analyzed the needs of human computer interaction (HCI) design.
e) explained various historic human computer interaction (HCI) paradigms.
f) evaluated the programming tools, windowing system, interaction toolkits, and user interface management systems.
g) applied an interactive design process and universal design principles to designing HCI systems.
h) developed the virtue of patience, love of God, prudence, commitment, accountability, responsiveness, excellence, integrity, leadership and self-discipline in their daily endeavors and in future occupations.

X. Learning Plan:

DESIRED LEARNING OUTCOMES	COURSE CONTENT/SUBJECT MATTER	TEXTBOOKS/REFERENCES	TEACHING AND LEARNING ACTIVITIES (TLAs)	ASSESSMENT OF TASKS (ATs)	RESOURCE MATERIALS	TIMETABLE
At the end of the unit, the students must have: 1. explained the vision, mission, core values of the University and the	Unit O: Vision, Mission, Core Values, Outcomes and Course Orientation	https://www.isatu.edu.ph/about-isatu/mission-vision-goals/ University Student Code	Homebased/Self-paced Learning (Online/Offline) • Teacher-led Discussion	Self-Introduction and Course Expectation	• Slide Presentation • Google Classroom/Social Learning Platform	Week 1-2 6 hours

institutional, college/campus, degrees and course outcomes. 2. familiarized with course requirements, criteria for grading, class policies and some provisions in the University undergraduate student handbook. 3. described flexible learning and identified the content of the course intended for face to face and self-paced learning.	1. The University vision, mission, core values and outcomes 2. The course outcomes of BSCS 3. The course outcomes of Human Computer Interaction (HCI) 4. Course requirements, criteria for grading, class policies and Students' Code of discipline 5. Gender and Development integration in ICT 116 6. Freedom of Information 7. Flexible Learning	CMO No. 25, Series of 2015 Course Syllabus in CS 22 – Human Computer Interaction	• Orientation		• Videos (Synchronous/ Asynchronous) • Course Guide	
At the end of the unit, the students must have: 1. discussed the Human Computer Interaction (HCI). 2. explained the capabilities of both humans and computers from the viewpoint of human information processing.	**Unit 1:** Foundations of Human - Computer Interaction • The human • The computer • The interaction	Dix, A., Finlay, J., Abowd, G.D., & Beale, R. (2004). Human – Computer Interaction, 3rd Edition. Prentice Hall Saffiong, Kebbeh.(n.d). Human Computer Interaction. Retrieved from http://oer.avu.org/handle/123456789/672 Techtarget Network. (n.d). HCI (human-computer interaction). Retrieved from http://searchsoftwarequality.tech	Homebased/Self-paced Learning • Lecture and Class Discussion	• Discussion Forum	• Slide Presentation • Video Clips • Module • Google Classroom/Social Learning Platform • Guide Question • OER Commons • Other Online References	Week 3-4 6 hours

		target.com/definition/HCI-human-computer-interaction Human Computer Interaction. Retrieved from https://www.cs.bham.ac.uk/~rxb/Teaching/HCI%20II/intro.html				
At the end of the unit, the students must have: 1. explained how the technology works. 2. explored other technologies that can be used for HCI design.	**Unit 2:** Styles of HCI and Prototypes of Future HCI • Styles of Human-Computer Interaction • The Future of Human-Computer Interaction	Dix, A., Finlay, J., Abowd, G.D., & Beale, R. (2004). Human – Computer Interaction, 3rd Edition. Prentice Hall Saffiong, Kebbeh.(n.d). Human Computer Interaction. Retrieved from http://oer.avu.org/handle/123456789/672 Carroll, John M. (n.d). Human Computer Interaction. Retrieved from https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/human-computer-interaction-brief-intro Brownlee, John. (13 May 2016). 8 Incredible Prototypes That Show The Future Of Human-Computer Interaction. Retrieved from https://www.fastcodesign.com/3059848/8-incredible-prototypes-	Homebased/Self-paced Learning (Online/Offline) • Lecture and Class Discussion	Assignment Individual/Small Group Research Output	• Slide Presentation • Module • Handouts (pdf) • Rubric • Google Classroom/Social Learning Platform • Video Clips • OER Commons • Other Online References	Week 5-6 6 hours

		that-show-the-future-of-human-computer-interaction Arroyo, Lora (16 June 2014). Human Computer Interaction (HCI) Prototyping. Retrieved from https://www.slideshare.net/laroyo/lecture-4-humancomputer-interaction-prototyping-2014 Brodkin, Jon. (2 September 2012). The future of human-computer interaction. Retrieved from https://www.networkworld.com/article/2217838/virtualization/the-future-of-human-computer-interaction.html Carroll, John M. (16, November 2001). The Evolution of Human-Computer Interaction. http://www.informit.com/articles/article.aspx?p=24103				
At the end of the unit, the students must have: 1. explained other fields that are related to HCI where it has been drawn. 2. discussed current research in the field of HCI.	**Unit 3:** Related Fields to Human-Computer Interaction • Introduction of HCI related fields in society, science and technology • The use of HCI in science and technology	Dix, A., Finlay, J., Abowd, G.D., & Beale, R. (2004). Human – Computer Interaction, 3rd Edition. Prentice Hall Saffiong, Kebbeh.(n.d). Human Computer Interaction. Retrieved from	Homebased/Self-paced Learning (Online/Offline) • Lecture and Class Discussion	Discussion Forum Summative Test	• Slide Presentation • Module • Handouts (pdf) • Google Classroom/Social Learning Platform • Video Clips • Guide Question	Week 7 3 hours

3. identified certain fields that has a great contribution in HCI.		http://oer.avu.org/handle/123456789/672 Human Computer Interaction. Retrieved from http://csfieldguide.org.nz/en/chapters/human-computer-interaction.html Wania, Christine E., Atwood Michael E., & McCain, Katherine W. (10 October 2007). Mapping the field of human-computer interaction (HCI). Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/meet.14504301233/pdf Class Discussion Churchill, Elizabeth, Bowser, Anne & Preece, Jennifer. (2013). Teaching and Learning Human-Computer Interaction. Retrieved from http://interactions.acm.org/archive/view/march-april-2013/teaching-and-learning-human-computer-interaction Human-Computer Interaction. Retrieved from https://psu.pb.unizin.org/ist110/chapter/5-2-human-computer-interaction/			• OER Commons • Other Online References	

At the end of the unit, the students must have: 1. explained various historic human–computer interaction (HCI) paradigms. 2. identified different paradigms involving HCI.	**Unit 4:** Paradigms • Paradigms for Interaction	Dix, Alan. (1 June 2009). Paradigms. Retrieved from https://www.slideshare.net/alanjohndix/hci-3e-ch-4-paradigms?qid=7a4c816e-f876-4f85-9dbb-9770d8c41100&v=&b=&from_search=1	Homebased/Self-paced Learning (Online/Offline) • Lecture and Class Discussion	Summative Test/ Activity	• Slide Presentation • Module • Handouts (pdf) • Google Classroom/Social Learning Platform • Video Clips • OER Commons • Other Online References	Week 8 3 hours
MIDTERM EXAMINATION – ONLINE (SYNCHRONOUS)						
At the end of the unit, the students must have: 1. elaborated the interaction basics in designing an effective human to computer relationships. 2. classified the users interaction, design process and prototypes.	**Unit 5:** Interaction Design Basics • The Process of Design • User Focus • Scenarios • Navigation Design • Screen Design and Layout • Iteration and Prototyping	Dix, A., Finlay, J., Abowd, G.D., & Beale, R. (2004). Human – Computer Interaction, 3rd Edition. Prentice Hall Saffiong, Kebbeh.(n.d). Human Computer Interaction. Retrieved from http://oer.avu.org/handle/123456789/672 Dix, Alan. (2 June 2009). Interaction Design Basics. Retrieved from https://www.slideshare.net/alanjohndix/hci-3e-ch-5-interaction-design-basics	Homebased/Self-paced Learning (Online/Offline) • Lecture and Class Discussion	Discussion Forum	• Slide Presentation • Module • Handouts (pdf) • Google Classroom/Social Learning Platform • Video Clips • Group Chat/Messenger/ Google Docs • OER Commons • Other Online References	Week 10-11 6 hours
At the end of the unit, the students must have: 1. applied HCI design principles, standards and guidelines.	**Unit 6:** Design Rules • Principles to Support Usability	Dix, A., Finlay, J., Abowd, G.D., & Beale, R. (2004). Human – Computer Interaction, 3rd Edition. Prentice Hall	Homebased/Self-paced Learning (Online/Offline)	Activity	• Slide Presentation • Module • Handouts (pdf)	Week 12-13 6 hours

2. illustrated the design patterns.	• Standards for Interactive System Design • Guidelines • Golden Rules and Heuristics • HCI Patterns	Saffiong, Kebbeh.(n.d). Human Computer Interaction. Retrieved from http://oer.avu.org/handle/123456789/672	• Lecture and Class Discussion		• Google Classroom/Social Learning Platform • Video Clips • OER Commons • Other Online References	
At the end of the unit, the students must have: 1. evaluated the programming tools, windowing system, interaction toolkits, and user interface management systems.	**Unit 7:** Implementation Support • Elements of Windowing Systems • Programming the Application • Using Toolkits • User Interface Management Systems	Dix, A., Finlay, J., Abowd, G.D., & Beale, R. (2004). Human – Computer Interaction, 3rd Edition. Prentice Hall Saffiong, Kebbeh.(n.d). Human Computer Interaction. Retrieved from http://oer.avu.org/handle/123456789/672	Homebased/Self-paced Learning (Online/Offline) • Lecture and Class Discussion	Assignment Summative Test	• Slide Presentation • Module • Rubric • Handouts (pdf) • Google Classroom/Social Learning Platform • Video Clips • OER Commons • Other Online References	Week 14-15 6 hours
At the end of the unit, the students must have: 1. elaborated evaluation techniques 2. applied evaluation techniques on how to analyze data.	**Unit 8:** Evaluation Techniques • Goals of Evaluation • Evaluation through Expert Analysis • Evaluation through User Participation • Choosing an Evaluation Method	Dix, A., Finlay, J., Abowd, G.D., & Beale, R. (2004). Human Computer Interaction (3rd ed.). Prentice Hall. Saffiong, Kebbeh.(n.d). Human Computer Interaction. Retrieved from http://oer.avu.org/handle/123456789/672	Homebased/Self-paced Learning (Online/Offline) • Lecture and Class Discussion	Discussion Forum	• Slide Presentation • Module • Handouts (pdf) • Google Classroom/Social Learning Platform • Video Clips • OER Commons • Other Online References • Group Chat/Messenger/ Google Docs	Week 16 3 hours

At the end of the unit, the students must have: 1. applied an interactive design process and universal design principles to designing HCI systems.	**Unit 9:** Universal Design • Universal Design Principles • Multi-modal Interaction • Designing for Diversity	Dix, A., Finlay, J., Abowd, G.D., & Beale, R. (2004). Human Computer Interaction (3rd ed.). Prentice Hall. Saffiong, Kebbeh.(n.d). Human Computer Interaction. Retrieved from http://oer.avu.org/handle/123456789/672	Homebased/Self-paced Learning (Online/Offline) • Lecture and Class Discussion	Summative Test	• Slide Presentation • Module • Handouts (pdf) • Google Classroom/Social Learning Platform • Video Clips • OER Commons • Other Online References	Week 17 3 hours
FINAL EXAMINATION – ONLINE (SYNCHRONOUS)						

XI. Course Requirement: Performance Tasks (Written Quizzes/Activity/Recitation/E-Portfolio)
Passing Mark in the term examinations

XII. Criteria for Grading

To pass this course, one must accumulate at least 60 % through the course requirements. The maximum points that a student can obtain through each requirement are shown below.

Requirement/Assessment Task	Maximum Percentage
Major Exams (Midterm/Final Exam)	40%
Performance Tasks (Written Quizzes/Activity/Recitation/E-Portfolio)	60%

Note: In the normal course of operation, this course syllabus shall be revisited every two years for possible revision of its content. If new DepEd/CHED programs, CMO's and university policies or other policies that will greatly affect the course content, it shall be revised immediately to cater the demands of the new programs, CMO's, policies, etc.

Date Revised/Enhanced: June 25, 2020

Prepared and Designed for the Bachelor of Science in Computer Science (BSCS)

Prepared and designed by:

JOSIE C. CALFOFORO
Instructor/Professor

NOTED:	CONCURRED:	APPROVED:
TRACY N. TACUBAN, DIT Department Head	ALEJO P. BITON, Ed.D. Dean/Head of Instruction	CORAZON C. CORBAL, Ph. D. VPAA/Campus Administrator

SUBJECT ENHANCEMENTS TO BE CONSIDERED DURING SUBJECT REVISION

Date	Suggested Enhancement/Teacher
June 25, 2020	Updated the references, course content/ subject matter.
June 25, 2020	Revised the Teaching and Learning Activities (TLAs) due to pandemic.

Note: This page shall be reserved for suggested revisions on the subject which will be taken up during the deliberation/revisit of the course syllabus. Revisions may be in the form of the methods of teaching, references, and logical flow of the course topics, the style of evaluation, and anything that will effectively produce positive results.