Office of the Registrar

FATA University

Tribal Subdivision Darra, NMD Kohat

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Extract of the Minutes of the Meeting of HoDs on Online Teaching

Subsequent to the Government Notification regarding extension of the closure of the Higher Educational Institutes (HEIs) till July 15, 2020, a meeting of all the heads of departments (HoDs) of FATA University was held at 10:00pm on May 11, 2020 on Skype-Meet. The agenda of the meeting was to discuss the arrangement made so far by the faculty for online teaching and to highlight the Standard Operating Procedures (SOPs) for online teaching in the light of HEC Guidance No. 5 (Online Readiness) as directed by the worthy Vice Chancellor, FATA University, in his email to all HoDs dated April 24, 2020.

All the HoDs showed satisfaction on the preparation of courses for online teaching by the faculty members and have tried to formulate the SOPs for online teaching after thorough discussion and consensus.

The following SOPs for online teaching have been formulated for approval from the OAC:

1. Existing course outlines (used for face-to-face teaching in the classroom) shall be modified as per online teaching requirements.
2. Every instructor shall prepare week-wise break down of the whole course contents to be taught online as per the attached Proforma Template (Annexure-1). This proforma includes instructor details, course contents, video lecture length duration etc.
3. The instructor shall develop course material such as power point slides, handouts, audio/video lectures of the slides (where applicable) etc.
4. HoD of each department in consultation with departmental focal person shall ensure the standard of video/audio lecture. They shall specifically ensure whether the video/audio lecture and its main highlights match with already shared weak-wise course break down of a particular course. They will also ensure the video, audio and presentation style for maximum understanding by the students.
5. Once the video contents of a particular course pass the initial quality check criteria by HoD and Focal Person of a department, the same shall be forwarded to the Advisor Academics / Dean.
6. Upon the satisfaction of the Academic Advisor / Dean, the course material shall be sent to the Online Academic Committee (OAC) for approval.
7. Once the OAC approves the course contents and related lectures / presentations items, after quality check mechanism, the delivery of online teaching of that course shall be allowed.
8. The time table for online classes shall be shared with the students ahead of time the teacher intends to deliver the online lecture.
9. The Focal Person of the OAC shall prepare a weekly report for placing before the OAC after receiving feedback of the students on online teaching and related matters on daily basis.

10. The OAC shall keep monitoring of the online teaching by considering the feedback received from the students and shall communicate the shortcomings, if any, to the concerned HoD for rectification.
11. If the concerns shown by the OAC are not addressed by the HOD and/or faculty member within a specified period of time, strict action shall be initiated against him/her for the negligence.
12. At present, as the University does not have an active Learning Management System (LMS) and generally there are problems in having good internet facilities by the students, the following steps should be taken to facilitate the students:
    a. The instructors should use a variety of technological tools (such as Google-Meet/Hangout, ZOOM, Whatsapp etc.) in delivering their lectures and discussion;
    b. The soft and print material should be provided to students through any possible mean as per the decision of the OAC.

The meeting was adjourned at 2:00pm.

Annexure-I

Proforma Template

Department offered	Computer Science
Name & Designation of the Teacher	Dr. Bilal Jan, Assistant Professor
Course Name	Network Security
Course Credit Hours	3-0
Semester#	7th

Text Book :-

1. Cryptography and Network Security – Principles and practices, by William Stallings, 7th Edition. Publisher: Prentice Hall

References:-

1. Computer Security: Art and Science, by Matt Bishop, 2nd Edition. Publisher: Addison Wesley
2. Computer Security Know It All by James Joshi and others. Published by Elsevier. Latest Edition

Course Description

Computer Security is the study of the principles and practices of computer system security including operating system security, network security, software security and web security. An introduction about the common security threats such as virus, trojan, worms and illegal memory exploitation is quite important. The formalisms of information security such as the access control and information flow theory; the common security policies; the basic cryptography, RSA, cryptographic hash function, and password system; the real system implementations, with case study of UNIX and Windows is discussed. Network intrusion detection; software security theory; web security; legal and ethical issues in computer security are briefly uncovered.

Pre-requisites:- Data Communication

Week-wise breakdown of online delivery of lectures:-

Week	Topics / Activities as per approved Syllabus of the degree program	Ch/ Sec	Video Lecture Downloadable link
1	Introduction; The OSI Reference Model and Security Architecture. Common Security Attacks and Services. A Model of Network Security	Chap-1 (ref-1)	http:docs/abc/example-only (Video Length, Size in MBs)
2	Explanation of the Terminology: Confidentiality,Authentication, Integrity, Non Repudiation, Authorization. Ensuring Confidentiality: Encryption and its types. Symmetric vs Asymmetric Ciphers. Random Number Generation: Linear Congruential Random Number.	Chap-2 (ref-1) and	http:docs/abc/example-only (Video Length, Size in MBs)
3	Symmetric Cipher Model. Substitution Techniques, Transposition and Rotor Machines. Block Ciphers and Data Encryption Standard (DES). Strengths and Weaknesses of DES.	Chap-2,3 (ref-1)	http:docs/abc/example-only (Video Length, Size in MBs)
4	Block Cipher Design Principles. Triple DES, Modes of Block Ciphers. Stream Ciphers and RC4. Secure Key Distribution: Problems and Solutions.	Chap-3,6 (ref-1) Chap-1 (ref-3)	http:docs/abc/example-only (Video Length, Size in MBs)
5	Advanced Encryption Standard (AES), Evaluation Criterion, AES Cipher and Algorithms. AES Versions and effect of Key Length on Security and Performance.	Chap-5 (ref-1)	http:docs/abc/example-only (Video Length, Size in MBs)
6	Ensuring Confidentiality through Symmetric Ciphers. Key Distribution Centers (KDC). Placement of Encryption Functions. Trade off among Security, Computation Cost and Performance.	Chap-7 (ref-1)	http:docs/abc/example-only (Video Length, Size in MBs)
7	Cryptography: Basics of Cryptography. Public-key Cryptography and RSA. The RSA Algorithm. Sample Example of RSA usage of Random Numbers.	Chap-9 (ref-1)	http:docs/abc/example-only (Video Length, Size in MBs)
8	Key Management: Key Generation and Exchange. Cryptographic Key Infrastructures. Storage and Revoking of Keys.	Chap-10 (ref-1)	http:docs/abc/example-only (Video Length, Size in MBs)
9	Authentication: User Authentication. Schemes for User Authentication;	Chap-12 (ref-1)	http:docs/abc/example-only

Week	Topics / Activities as per approved Syllabus of the degree program	Ch/ Sec	Video Lecture Downloadable link
	Passwords, Digital Certificates, Digital Signature, Biometrics.		(Video Length, Size in MBs)
10	Hash Function: The need of Hash Function. Secure Hash Algorithm, Cryptographic Hash Function.	Chp12 (ref-1)	httsp:docs/abc/example-only (Video Length, Size in MBs)
11	Message Authentication. Popular Schemes, Password based Authentication, Message Authentication Code (MAC).	Chp16 (ref-1)	httsp:docs/abc/example-only (Video Length, Size in MBs)
12	IP Security: IP Security Overview, Authentication header. Encapsulating Security Payload, Combining Security Association.	Chp17 (ref-1)	httsp:docs/abc/example-only (Video Length, Size in MBs)
13	Implementing Computer Security: Design Principles, What is Identity, Files and Objects. Users and Groups, Naming and Certificates. Identity on the Web.	13,14 (ref-1)	httsp:docs/abc/example-only (Video Length, Size in MBs)
14	Access Control Management, Locks and Keys. ACL on Routers. Ingress/Outgress Filtering. Firewalls: Design, Implementation, Customization	15 (ref-1)	httsp:docs/abc/example-only (Video Length, Size in MBs)
15	Intrusion Detection System (IDS). Host based and Network based IDS. Open source softwares for IDS.	Chap-18 (ref-1)	httsp:docs/abc/example-only (Video Length, Size in MBs)
16	**End Semester Exam**		