Course Structure - M.A. Defence and Strategic Studies Revised in Sept 2023 | Applicable for admission from A.Y. 2023-24 onwards



गुजरात केन्द्रीय विश्वविद्यालय

(भारत की संसद के अधिनियम सं. 25, 2009 के तहत स्थापित)

CENTRAL UNIVERSITY OF GUJARAT

(Established by an Act of Parliament of India, No 25 of 2009)

Syllabus

for

M.A. Defence and Strategic Studies

based on

Learning Outcomes Based Curriculum Framework (LOCF)

National Credit Framework (NCrF)

and

Choice-Based Credit System

Revised September 2023 Applicable for admission from A.Y. 2023-24 onwards

Centre for Security Studies School of National Security Studies Central University of Gujarat

Central University of Gujarat

Established by Parliament of India through the Central Universities Act (2009), Central University of Gujarat (CUG) considers its main objectives to be dissemination and advancement of knowledge creation and sharing. The University is committed to make special provisions for integrated and interdisciplinary courses, to educate and train human resources for the country's development, to initiate appropriate measures for promoting innovation in teaching and learning and to pay special attention to improve the social and economic conditions and welfare of the people, especially pertaining to their intellectual, academic and cultural development. The University was ranked overall 60th in India and 2nd among all the Universities in Gujarat in NIRF 2016 rankings. According to NIRF 2017, the University ranked among the top 150 Universities in the country.

ΜΟΤΤΟ

Providing a Global Platform for Knowledge and Employability to our Students along with Society and Industry Interface.

OUR MISSION

The mission of CUG is to provide access to quality education and create opportunities for encouraging students to effectively engage with emerging innovations and technological challenges, international competitiveness and leadership in thought as well as in action. CUG is also conscious of the importance of developing entrepreneurial and scholastic abilities for creation of knowledge, wealth and prosperity for the country as well as peace and happiness for human beings.

OUR VISION

The vision of CUG is to establish itself as a centre of excellence with social commitment by integrating modern, scientific and technological knowledge and skills with the basic human ethos and values. The University shall set forth a model in teaching, research and personality development and create skilled human resource with a sense of responsiveness towards society, the country and the world at large..

OBJECTIVES

The primary objectives of CUG are:

- Dissemination and advancement of knowledge by providing instructional and research facilities in various branches of learning.
- Making special provisions for integrated courses in humanities, social sciences, science and technology in educational programmes.
- Taking appropriate measures for promoting innovations in teaching-learning methods and interdisciplinary training and research.
- Educating and training human resource for the country's development.
- Establishing academic-industries partnership to promote advancements in science and technology.
- Paying special attention to the improvement of social and economic conditions and welfare of the people, especially pertaining to their intellectual, academic and cultural development.

SEMESTER SYSTEM

For long, educational institutions have had the format of academic session, spread over 10 to 12 months. This format suffers from several limitations, which is why most institutions of higher education in Western Europe and North America follow a semesterbased system. The semester system goes far beyond being a 'time-format'. It enlarges curricular space, and encourages and supports accelerated learning opportunities for all concerned. Further, it has the ability to accommodate diverse choices that dynamic and motivated students may like to have. In view of this, the Central University of Gujarat follows the semester system. The students would be offered choice based credit system.

CHOICE BASED CREDIT SYSTEM (CBCS)

CBCS is a flexible system of learning. 'Credit' defines the quantum of contents / syllabus prescribed for a course and determines the number of hours of instruction required. The distinguishing feature of CBCS are the following.

- Learn at their own pace.
- Choose electives from a wide range of elective courses offered by the university departments.
- Undergo additional courses and acquire more than the required number of credits
- Adopt an inter-disciplinary approach in learning
- Make best use of the expertise of available faculty
- They would be encouraged to take other courses different from their discipline of study. The students would also be encouraged to take courses from other Central Universities on the basis of credit transfer. The efforts would be made to introduce the Project Work even for the subjects other than natural sciences. Moreover, among other things, the students have to give seminars, write term papers etc as a part of their academic curriculum.

Present Campus of the University

The Central University is temporarily located in Gandhinagar. The permanent campus is under construction in Kundela near Baroda, Gujarat.

LOCF in Defence and Strategic Studies

LOCF in Defence and Strategic Studies is intended to provide a broad framework within which the discipline could respond to the changing needs of its various stakeholders. The template is an initiative of new kind and is expected to assist in the building and maintenance of Post graduate Programme in Defence and Strategic Studies with innovative s kill by holding a periodic review within a broad framework of an agreed structure as standard reference. It is pertinent to mention that Defence & Strategic studies as a separate discipline is still underway to its final accomplishment vis a vis other established subjects/disciplines. This is notwithstanding, the other variants in which the discipline have not even acquired the status of a full degree programme, rather rests as part of or one of the elective subjects in the faculty of Arts, Humanities and Sciences. There is strong plea to have a Master's degree programme in Defence and Strategic Studies to brand it more sovereign in outlook.

Incredible, while security is a buzz word penetrating all pervasively at the, national and global level, the significance of this subject remains almost an amiss in country's scenario.

LOCF however, is a great strategic enterprise to this effect to build an architecture in not only reviewin the existing course curricula, but also endeavor to create a roadmap for its variants verticals - be the institutions serving the discipline; the faculty, the students or the societal environment providing a desired turf for a more meaningful dispensation in the long run. A thought process has been generated to set and raise the standards in the subject shoving it at par with other academic programmes. For instance, a misperception gets created that the subject lacks employability avenues. Whereas given to its potential it has high value job creation credentials. But the general apathy in awareness and understanding towards security issues at institutional levels has been of great hindrance in the growth of this subject. The LOCF provides a platform to look into certain progenial issues through obligatory sanctity attached to the development of this academic program which could best be cultivated. There is a dire need to look holistically towards the subject to make it more attractive and relevant meaningfully.

Defence and Strategic Studies as a subject demands specialized audience which currently dwells more on free for all. In the coming time, when specialization at micro level is the need of art, the subject too demands a favorable consideration and attention to contribute to the national potential. The thrust line is interest and passion which can extrapolate into various manifestations. It may be interesting to pen down the views of one of the student who said `the subject gave me an opportunity to grow not only in many ways but each day also; grooming me to imbibe can do attitude'. However, there is great need to showcase the subject in its own turf due to its multi - disciplinary spread into arts, science, management, sports, leadership strategy and defining of political behavior. LOCF provides an opportunity to examine such various dimensions.

Introduction

The subject of Defence / National Security Studies holds unique significance and demand security consciousness in society in which academics have a wider role to play. LOCF definitely is a moderate attempt in this regard to introspect the causes and reasons of rigidity and tepidity which revolves around the subject. However, there is a dire need of equipping our young academic community. There is a desire for any career launcher in academics to acquire overall knowledge, increase horizon including getting conversant with communication skills and teaching aids.

Learning Outcomes Based Approach to Curriculum Planning for Defence and Strategic Studies (at Post Graduate level)

The fundamental premise underlying the learning outcomes based approach to curriculum planning is that the Masters degree programme in Defence and Strategic Studies shall be awarded on the basis of demonstrative achievements outcomes as:

- Attainment of sound knowledge about the basics that the students is expected to imbibe in the subject.
- Having a clear understanding of the key concepts related to the subject along with their applications in real life situations.
- Development of analytical skills so as to be able to appreciate the importance of the subject and spread its awareness.
- Inculcate a spirit of nationalism and develop good values contributing to building strong national character.

Aims of the Master's Degree in Defence and Strategic Studies

- Defence and Strategic Studies as a subject and degree cover all strategic aspects that can have a bearing on the learning of security issues in the defence of the country. The overall objectives of Master's degree programme in Defence and Strategic Studies are to –
- Formulate qualitative description combining domain knowledge with gains from choice based credit system enabling students to qualify for jobs even outside the discipline demonstrating mobility of service.
- Instill the master skills, knowledge and abilities to understand national security issues analytically which to help the students to pick up adequate comprehension on matters security. Infuse each graduate with a desire to be a lifelong learner and plan to pursue professional courses related to Defence and Strategic Studies to be a domain specialist.
- Imbue an appreciation of one's civic duties and responsibilities towards society and demonstrate knowledge of contemporary or emerging threats, challenges or issues thereby contributing to strategic culture.
- Encourage leadership qualities amongst students and raise ability to work as a team.
- Gain an understanding of professional ethics and to apply in the field of national security rather than replicate curriculum content knowledge
- Demonstrate the ability to apply one's disciplinary knowledge and skills to new frontiers and be a partner ensuring global competitiveness.
- Undertake mechanism to periodically review of teaching programmes including adoption of teaching learning techniques.

Programme Learning Outcomes relating to Master's Degree Programme in Defence and Strategic Studies (Honours/Regular Course)

Upon completion of the programme of Master's in Defence and Strategic Studies, a student should have acquired advanced competency in Strategic affairs covering a wide spectrum of interstate security to global security issues including non kinetic dimensions.

- Shall develop capability in understanding the implications of use and threat of use of force in International relations.
- Shall seek, identify and apply the acquired knowledge in defence and strategic studies on contemporary issues of strategic relevance.
- Ability to move from LOTS (Lower Order of Thinking Skills) to HOTS (Higher Order of Thinking Skills) in Defence and Strategic Studies.
- The learning of strategic studies shall arm the candidates to independently choose further course of action in his/her life whether pursuing higher education by taking specialized course in honours or identifying a career for himself or herself.

Course – Level Learning Outcomes - Learning Outcomes-Based Curriculum Framework (LOCF) is an educational theory that bases each part of an educational system around goals (outcomes). By the end of the educational experience, each student should have achieved the goal. There is no single specified style of teaching or assessment in LOCF; instead, classes, opportunities, and assessments should all help students achieve the

specified outcomes. The role of the faculty adapts into instructor, trainer, facilitator, and/or mentor based on the outcomes targeted.

Semester wise Course Map in M.A. Defence and Strategic Studies

- **First Semester (All Core) 20 Credits** (Students have to register for all 04 Core papers & STS 441
- Second Semester (All Core) 20 Credits (Students have to register for all 04 Core papers & STS 491)
- **Third Semester (20 Credits)** Students can register for any 4 optional courses plus STS-541 & STS-xxx
- Fourth Semester (20 Credits) Students can register for any 4 optional courses plus STS-591

Types of Courses in the M.A. Defence and Strategic Studies at Centre for Security Studies, School of National Security Studies

- **Core Courses**: Will be in the subject of specialization in the PG Programme of Defence and Strategic Studies.
- **Discipline Specific Elective Courses**: These are optional courses offered in 3rd and 4th Semester which will enable the student to specialize in various sub-field s of the broader discipline as per their aptitude.
- **Compulsory Courses**: These courses would be in soft skills, life skills, skill enhancement including communication, personality development etc.
- **Holistic Courses**: These courses would provide value addition to students like national integration, holistic development, environmental conservation, democratic values etc.
- **Multidisciplinary Courses**: Courses to be taken from other schools of the University to foster interdisciplinarity.

Expectations from Students

- Regular attendance and participation in the courses and related activities
- Go through the readings assigned as part of the courses
- Engage in various issues related to the course and participate in other related activities like special lectures etc. organized by the department.

Spirit of NEP-2020

The University and the respective departments & programs emulates & imbibes the Spirit of the NEP postulations. It shall persevere to achieve recognizing, identifying, and fostering the unique capabilities of each student, by sensitizing teachers as well as parents to promote each student's holistic development in both academic and nonacademic spheres.

To adapt flexibility, so that learners have the ability to choose their learning trajectories and program, and thereby choose their own paths in life according to their talents and interests; The courses designed are being tailored to keep no hard separations between arts and sciences, between curricular and extra-curricular activities, between vocational and academic streams, etc. in order to eliminate harmful hierarchies among, and silos between different areas of learning. In the spirit of multidisciplinary orientation and a holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world in order to ensure the unity and integrity of all knowledge, is being ensured.

There is an emphasis on conceptual understanding rather than rote learning and learning-for-exams. Creativity and critical thinking to encourage logical decision-making and innovation is being inculcated. Ethics and human & Constitutional values like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice is being promulgated. There is promotion of multilingualism and the power of language in teaching and learning.

Life skills such as communication, cooperation, teamwork, and resilience are being taught through special class interactions on personality development. Focus on regular formative assessment for learning rather than the summative assessment that encourages today's 'coaching culture'; There is an extensive use of technology in teaching and learning, removing language barriers, increasing access for Divyang students, and educational planning and management; & respect for diversity and respect for the local context in all curriculum, pedagogy, and policy, always keeping in mind that education is a concurrent subject. Full equity and inclusion as the cornerstone of all educational decisions to ensure that all students are able to thrive in the education system is being sought.

Teachers and faculty as the heart of the learning process – their recruitment, continuous professional development, positive working environments and service conditions is being pursued. A 'light but tight' regulatory framework to ensure integrity, transparency, and resource efficiency of the educational system through audit and public disclosure while encouraging innovation and out-of-the-box ideas through autonomy, good governance, and empowerment. Outstanding research as a corequisite for outstanding education and development is already under pursuits.

Continuous review of progress based on sustained research and regular assessment by educational experts is carried out. A rootedness and pride in India, and its rich, diverse, ancient and modern culture and knowledge systems and traditions is present and being inculcated. The university believes in Education as a public service & its access to quality education must be considered a basic right of every child. Substantial investment in a strong, vibrant public education system as well as the encouragement and facilitation of true philanthropic private and community participation is an ensconced aim.

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| Course Code | Course Title | Type of Course | Credits | Remark |
|----------------|--|-----------------------------------|---------|--|
| | First Semester (20 Credits) | | | |
| STS-401 | Introduction to Strategic and Security Studies | Core | 04 | Revise |
| STS-402 | Theories of International Relations | Core | 04 | Revise |
| STS-403 | Strategic Thinkers | Core | 04 | Revise |
| STS-405 | War & Warfare | Core | 04 | New |
| STS-441 | Soft Skill Development | Compulsory | 02 | Revise |
| STS-442 | Fundamentals of Digital World | Compulsory | 02 | New |
| | Second Semester (20 C | redits) | | |
| STS-451 | India's National Security | Core | 04 | Revise |
| STS-455 | Geopolitics and Military Geography | Core | 04 | Revise |
| STS-453 | India's Defence Policy and Defence Economics | Core | 04 | Revise |
| STS-454 | Science Technology and National Security | Core | 04 | Revise |
| STS-491 | Communication Skills and Computer Applications | Compulsory | 02 | Revise |
| STS-492 | Data Science and Applications | Compulsory | 02 | New |
| | Third Semester Maximum of 04 Optional DSE & 01 Foreign Language & STS-541 & STS-544 | | | STS-544 |
| STS-522 | Introduction to Non-Traditional Security | Optional DSE | 04 | Revise |
| STS-523 | Conflict, Security and Development | Optional DSE | 04 | Revise |
| STS-525 | China's Foreign and Security Policy | Optional DSE | 04 | Revise |
| STS-526 | Disaster Management | Optional DSE | 04 | Revise |
| STS-527 | Introduction to Geographic InformationOptional DSE04System (GIS)04 | | 04 | Revise |
| STS-528 | Global Terrorism and Internal Security of Optional DSE 0- India | | 04 | New |
| STS-529 | European Union as a Global ActorOptiona | | 04 | From 4 th to 3 rd |
| STS-530 | Computer Programming (C & C++) | Optional- DSE | 04 | New |
| STS-541 | Introduction to Research Methodology | Compulsory | 02 | Revise |
| STS-544 | Artificial Intelligence and Applications | Compulsory | 02 | New |
| STS-542 | Introduction to Chinese Language - 1 | Compulsory (Minor Elective) | 02 | Revise |

| Course | Course Title | Type of | Credits | Remark |
|---------|---|------------------|---------------|---------|
| Code | | Course | | |
| OR | OR | | | |
| STS-543 | Introduction to French Language - 1 | Compulsory | 02 | Revise |
| | | (Minor | | (in |
| | | Elective) | | LOCF) |
| | Fourth Sen | nester | | |
| | Maximum of 04 Optional DSE & 01 Fore | ign Language & S | STS-594 & | STS-595 |
| STS-572 | National Security and India's Foreign Policy | Optional- DSE | 04 | Revise |
| STS-573 | Cyberspace and National Security | Optional- DSE | 04 | Revise |
| STS-574 | WMD and National Security | Optional- DSE | 04 | Revise |
| STS-582 | Introduction to Outer Space and Space Optional-DSE 04 Security | | 04 | New |
| STS-576 | International Organisation and Global Governance | Optional-DSE | 04 | Revise |
| STS-577 | Intelligence Agencies and India's National Security | Optional-DSE | 04 | Revise |
| STS-583 | Maritime Security and Governance | Optional-DSE | 04 | New |
| STS-584 | Military History and Wars in India | Optional-DSE | 04 | New |
| STS-579 | Introduction to West Asia | Optional-DSE | 04 | Revise |
| STS-585 | Corporate Security & Risk Mitigation | Optional-DSE | 04 | New |
| STS-594 | Computer Programming Project/Internship and Field Report | Compulsory | 02 | New |
| STS-595 | Python Programming | Compulsory | 02 | New |
| STS-592 | Introduction to Chinese Language – 2 | Compulsory | 02 | Revise |
| | | (Minor | | |
| | | Elective) | | |
| OR | OR | | | |
| STS-593 | Introduction to French Language – 2 | Compulsory | 02 | Revise |
| | | (Minor | | |
| | | Elective) | | |

Optional Discipline Specific Elective -DSE

INTRODUCTION TO STRATEGIC AND SECURITY STUDIES

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-401 |
| Course Type | Core |
| Credit | 04 |
| Contact Hours | 4 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability |
| Relevance of course to | National, Regional and Global level |
| Relation to | Gender, Professional Ethics |

Course Description: This is an introductory course in the field of strategic and security studies. It provides an overview of the evolution and development of this subdisciplinary study along with theoretical approaches and key concepts. And the course will address major debates in a conceptual framework for understanding and analysing the main issues and challenges to international security.

Course Objective:

To provide students an introduction to the field of strategic and security studies. To provide students with an overview of the changing notion of security and its contemporary challenges. It familiarises them with various essential concepts and approaches as a field of study.

| On comp | oletion o | f the course students will be able to :- |
|----------|-----------|--|
| Unit- 1 | LO 1 | Understand the concepts of strategic studies/security studies and the origin of the discipline, and learn how it relates or differs from security studies. |
| Unit – 2 | LO 2 | Students will be able to understand the leading theories of security studies and how they influence the way they think about current security discussions. |
| Unit – 3 | LO 3 | Develop an ability to understand some of the major debates in international security. Critically assess the different analytical frameworks used in the field of study in interpreting the broader concept of security. |
| Unit – 4 | LO 4 | Students will be able to identify emerging security threats across a wide range of dimension (traditional and non-traditional). Analyse and articulate the implications of contemporary security issues and challenges in national and international security, and in the world politics. |

Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content

Unit 1: Introduction

- Global Politics & International Security in the Post Second World War
- Origin and evolution of Security studies
- Does strategic studies differ from security studies?

Unit 2: Security Studies Theories: Expanding threats and referents

- Realism and Security Dilemma
- Constructivism and Securitisation theory
- Critical Security Studies and Human Security

Unit 3: Debating Security in the post Cold War era

- Notion of Security before 1990s
- Rethinking the international (In)Security
- Broadening and Deepening security agenda

Unit 4: Contemporary Issues and Security Challenges

- Technology and warfare
- Politics of Humanitarian intervention and Terrorism
- Proliferation of Small arms, transnational crime and Refugee

Readings - 4 Units

Unit 1 - Readings

- 1. David A. Baldwin (1997), 'The Concept of Security', Review of International Studies Vol. 23, 5-26.
- 2. CHapter 1: of Allan Collin (2006), "Contemporary Security Studies,"
- 3. Chapter 1: of John Baylis and James J Wirtz (2002), 'Introduction' of John Baylis, Wirtz and Gray (ed.), 'Strategy in the Contemporary World', (New York: Oxford University Press), pp: 1-14.
- 4. Chapter 1: 'Security Studies: An Introduction' of Paul D. William (ed.), (2013) Security Studies: An Introduction.Routledge, pp: 1-12.
- 5. Chapter 1: 'Defining International Security Studies' of Barry Buzan and Lene Hansen (2009). The Evolution of International Security Studies. Cambridge University Press.
- 6. Hedley Bull, Strategic Studies and Its Critics, in Barry Buzan and Lene Hansen (eds), International Security (Vol. 1).

Unit 2 - Readings

- 1. Chapter 2, 5, and 7: of Paul D. William, (2013) Security Studies: An Introduction. Routledge, pp: 1-12.
- 2. Robert Gilpin (1998), "The Theory of Hegemonic War", The Journal of Interdisciplinary History, Vol. 18 (4): 591-613.
- 3. Chapter 2, and 6: of Allan Collin (2006), "Contemporary Security Studies,"
- 4. Chapter 7, and 8: of Allan Collin (2006), "Contemporary Security Studies,"
- 5. Chapter 10, and 12 of Allan Collin (2006), "Contemporary Security Studies,"
- 6. Keith Krause and Michael C. William (eds) (1997), Critical Security STudies: COncepts and Cases, Minneapolis: University of Minneapolis Press.

Unit 3- Readings

- 1.
- 2. Ken Booth, 'Security and Emancipation,'
- 3. Mohammed Ayoob, (1991), "The Security Problematic of the Third World," World Politics, Vol. 43 pp: 257- 283.)
- 4. Stephen M. Walt (1991), "The Renaissance of Security Studies,' International Studies Quarterly, 35(2), pp: 211---239.

- 5. Steve Smith, 'The Contested Concept of Security,' (in Ken Booth (2005), ed. 'Critical Security Studies and World Politics,' Boulder, CO: Lynne Rienner Publishers.
- 6. David A. Baldwin, Security Studies and the End of the Cold War
- 7. Barry Buzan (1997), "Rethinking Security after the Cold War," Cooperation and Conflict, Vol. 32, No. 5, pp: 5-28.
- 8. Keith Krause and Michael C. Williams (1996), "Broadening the Agenda of Security Studies: Politics and Methods." Mershon International Studies Review, Vol. 40, No.2 pp: 229-54.
- 9. Edward A. Kolodziej, 'Renaissance in Security Studies? Caveat Lector!
- 10. Ole Waever, "Securitisation and Desuritisation",

Unit 4 - Readings

- 1. Chapter 23: The International Arms Trade', of John Baylis (ed.), 'The Globalization of the World Politics,'
- 2. Paul Roger, 'Terrorism', in Paul D. William ed. "Security Studies: An Introduction'.
- 3. James D. Kiras, 'Terrorism and Globalisation,' in John Baylis (ed.), 'The Globalization of the World Politics,'
- 4. Darryl Howlett, "Nuclear Proliferation," in John Baylis (ed.), 'The Globalization of the World Politics,'
- **5.** Andrew Thompson, "Humanitarian interventions, past and present"
- **6.** Mohammed Ayoob (2004), "Third World Perspectives on Humanitarian Intervention and International Administration", The Politics of International Administration, Vol. 10, No. 1, pp. 99-118.

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THEORIES OF INTERNATIONAL RELATIONS

| Pre-requisites for the Course | Bachelors in any discipline | |
|-------------------------------|---|--|
| Course Code | STS-402 | |
| Course Type | Core | |
| Credit | 04 | |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) | |
| Course focussing on | Employability | |
| Relevance of course to | National, Regional and Global level | |
| Relation to | Gender, Environment & Sustainability, Human Values and Professional Ethics | |

Course Description: This is an M.A. level course which will introduce students to various theories of International Relations and Security Studies. It is structured around the classical and contemporary theories of International Relations and it will survey both mainstream and critical approaches, examine how these theories conceptualize International Relations and Security Studies as a field of study and studies the relationship between the theory and practice of international relations.

Course Objective: The course aims to enable students: To familiarize students with theory and theorizing; To introduce students to key theories of International Relations and understand their strengths and weaknesses; To interrogate how International Relations has been constructed as a field of study; and to demonstrate how theories can be used to examine and explain international events and processes.

On completion of the course students will be able to :-

LO 1 – understand importance of theories and theorising

LO 2 – understand International Relations has been constructed as a field of study.

LO 3 – differentiate and know the main theories of International Relations and understand their strengths and weaknesses

LO 4 – demonstrate how theories can be used to examine and explain international events and processes.

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks End Semester Exam - 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do

a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content

Unit 1: What is Theory?

- What is International Relations (major issues in Cold War and post-Cold War)
- What is Theory and how is theory useful?
- What is I.R. Theory?

Unit 2: Realist Theories of International Relations

- Realist Traditions
- Classical Realism
- Neo Realism / Structural Realism
- Criticism of Structural Realism

Unit 3: Liberal Institutionalism and Regime Theory

- Liberalism/ Neo-Liberalism
- International Regimes
- Liberal Institutionalism
- Domestic Politics and International Behaviour

Unit 4: Alternative Approaches to Theorizing International Relations

- Critical Theory
- Feminist Theory
- Constructivism
- Debates on IR Theory from Global South

Readings (4 Units)

Unit 1 - Readings

- Kenneth Waltz, "Laws and Theories," in Robert O. Keohane, ed. *Neorealism and Its Critics*,
- James Rosenau, "Thinking Theory Thoroughly. 19-26. Originally published in James N. Rosenau, The Scientific Study of Foreign Policy, London: Frances Pinter, 1980, 19-31.
- Martin Wight, "Why is There No International Theory," in H. Butterfield and Martin Wight (Eds.), *Diplomatic Investigations*, Harvard University Press, 1996, pp. 17-34.

Unit 2 - Readings

- Thucydides, "The Melian Dialogue", from *History of the Peloponnesian War*.
- Niccolo Machiavelli, "On Princes and the Security of their States", from *The Prince*.
- Thomas Hobbes, "Of the Natural Condition of Mankind", from Leviathan.
- Jean Jacques Rousseau, "The State of War: Confederation as Means to Peace in Europe".

- Hans J. Morgenthau, "Chapter 1: A Realist Theory of International Politics" from Hans J. Morgenthau, *Politics Among Nations*, pp 1-15.
- Hans J. Morgenthau, "Chapter 14: Evaluation of the Balance of Power" from Hans J. Morgenthau, *Politics Among Nations*, pp 204-223.
- E.H. Carr, "The Nature of Politics" from E.H. Carr, *The Twenty Years' Crisis 1919-1939*, pp. 91-96.
- Hedley Bull, "International Theory: The Case for a Classical Approach," in *Contending Approaches to International Politics*.
- Kenneth Waltz, "Explaining War: The Levels of Analysis", from *Man, the State and War*.
- Kenneth Waltz, "Reductionist and Systemic Theories in *Theories of International Politics*, pp. 60-78.
- Robert O. Keohane, "Theory of World Politics: Structural Realism and Beyond", in Robert O. Keohane, ed. *Neorealism and its Critics*, pp. 158-201.
- 1. John Gerard Ruggie, "Continuity and Transformation in World Polity: Towards Neo-realist synthesis", in Robert O. Keohane, ed. *Neorealism and its Critics*, pp. 131-157.

Unit 3- Readings

- Robert D. Putnam, "Diplomacy and Domestic Politics: The Logic of Two-Level Games" in Peter B. Evans, Harold K. Jacobson and Robert D. Putnam, eds. *Double Edged Diplomacy*, pp. 431-468.
- "Introduction: Three perspectives on international regimes" in Andreas Hasenclever, Peter Mayer and Volker Rittberger, *Theories of International Regimes*, Cambridge: Cambridge University Press
- John Ikenberry, "Institutions, Strategic Restraint, and the Persistence of American Postwar Order," *International Security*, Vol. 23, No. 3, Winter 1998-1999, pp. 43-78.
- Robert O. Keohane and Joseph S. Nye, "Realism and Complex Interdependence", in *Power and Interdependence*, pp. 23-37.
- Robert Jervis, "Security Regimes", *International Organization*, Vol. 36, No. 2, Spring 1982, pp. 357-378.
- Joseph M. Greico, "Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism", *International Organization*, Vol. 42, No. 3, Summer, 1988, pp. 485-507.

Unit 4 – Readings

- Richard Devetak, "Critical Theory", in Scott Burchill and Andrew Linklater, eds, *Theories of International Relations*, London, Macmillan Press, 1996, pp. 145-178.
- J. Ann Tickner, "Hans Morgenthau's principles of Political Realism" A Feminist Reformulation".
- Carol Cohn, "Sex and Death in the Rational World of Defence Intellectuals", *Signs: Journal of Women in Culture and Society*, Vol. 12, no. 4, pp. 687-718.
- Wendy Brown, *Manhood and Politics: A Feminist Reading in Political Theory*, Rowman and Littlefield, 1988. (Selected Sections).
- Alexander Wendt, "Anarchy is What States Make of it: The Social Construction of Power Politics, *International Organization*, Vol. 46, no. 2, 1992, pp. 391-425.
- Mohammed Ayoob, "Defining Security: A Subaltern Realist Perspective", in Krause and Williams eds, *Critical Security Studies*, pp. 121-146.

• Amitav Acharya, "The Periphery as the Core: The Third World and Security Studies", in Krause and Williams eds. *Critical Security Studies*, pp. 299-327.

STRATEGIC THINKERS

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-403 |
| Course Type | Core |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Environment & Sustainability, Human Values and Professional Ethics |

Course Description: This course will introduce students to world famous strategic thinkers and their dominant theories along with its significance in the contemporary world. Students would be able to explore the domain of warfare in land, water, air, space and cyber world at the end of the course. Meanwhile students would also be able to analyse where India stands in this whole spectrum.

Course Objective: The course aims to enable students: To acknowledge students about strategic thoughts of various thinkers. To enable students to analyse the concepts on land, sea, air, outer space and cyber warfare/power. To inform the students about contemporary hybrid warfare/strategy and India's participation in the system/domain.

On completion of the course students will be able to :-

LO 1 – Understand the concept, meaning and definitions of military strategy. Student would be able to understand the strategic culture of nations and different types of strategies states practices in the international system.

LO 2 – Students will be able to understand Kautilya's military strategy practiced by India during the Mauryan period. Provide ideas on strategic thinking of notable figures including Sun Tzu, Machiavelli, Jomini and Clausewitz.

LO 3 – Explore the types of war which are fought in land, sea, air, outer space and cyberspace in the modern period. Many theorist and their strategies adopted in the domain warfare will be able to analysed by students from this unit.

LO 4 – Examine the strategies of nuclear warfare and those who strategically think about the irregular warfare. Will also be able to enhance their academic knowledge on diverse ways of thinking and debates of nuclear weapons and irrigularwarfare in the contemporary world order.

Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content

Unit 1- Introduction to Strategic Thoughts

- Concept and Definition of Military Strategy
- Overview of Strategic Culture
- Types of Strategy

Unit 2 – Classical Military Thinkers

- Sun Tzu, Kautilya, Thucidides
- Machiavelli and Jomini
- Carl von Clausewitz

Unit 3 - Modern Strategic Thinkers with War Domains

- Land: Mackinder, F.C. Fuller; Sea: Alfred T. Mahan
- Air Power: Giulio Douhet, Billy W. Mitchell, Sir Hugh Trenchard
- **Space**: Colin S. Gray; Cyberspace: Martin C. Libicki

Unit 4 - Nuclear Strategists and Irregular War Thinkers

- Bernard Brodie, Thomas Schelling
- Herman Kahn
- Mao Tse Dong, and Che Guevera

Readings List

- Shekhar Adhikari (2004), *Modern Strategic Thought: Machiavelli to Nuclear Warfare*, New Delhi: Kilaso Books.
- Carl Von Clausewitz trans. James John Graham (1873), *On War*, London. Trubner.
- E. M. Earle (1943), *Makers of Modern Strategy: From Machiavelli to Nuclear Age*, Princeton: Princeton University Press.
- Beatrice Heuser (2010), *The Strategy Makers: Thoughts on War from Machiavelli to Clausewitz*, California: Praeger.
- Martin Van Creveld (2000), *The Art of War & Military Thought*, London: Cassell& Co., Wellington House.
- Mao Tse Tung (1961), *Guerrilla Warfare*, Urbana: University of Illinois Press.
- Gray, C. S. (1996). The influence of space power upon history. Comparative Strategy,293-308.
- Gray, C. S. (2013). *Making Strategic Sense of Cyber Power: Why the Sky is not Falling*. Pennsylvania: U.S. Army War College Press.

| War & | Warfare |
|-------|---------|
|-------|---------|

| Pre-requisites for the Course | Bachelors in any discipline | |
|---|--|--|
| Course Code | STS-405 | |
| Course Type | Core | |
| Credit | 04 | |
| Contact Hours | 4 hours per week (including 1 hr consultation/tutorial) | |
| Course focussing on | Employability | |
| Relevance of course to | National, Regional and Global level | |
| Relation to | Gender, Professional Ethics | |
| Course Description : This course will aim at understanding of the major contributors and characteristics of Wars. This would include the concepts of war and warfare, historical background and its evolution, types of warfare, theory of war, modern warfare, generations & future of warfare, non-traditional security threats and unconventional war - terrorism. The paper will also investigate the key ideas and issues that have influenced them with case studies. The emphasis is on causes and conduct of wars and conflicts South Asia and West Asia. Course Objective : The course aims to enable students to familiarize students with the theories, terms, concepts and causes of war and warfare. | | |
| LO-1 Understand the Concepts and defir Conventions and legal aspects. | nitions of War, History of Warfare, | |
| assimilation of knowledge in Theory of subject of warfare with its evolutionary LO-3 Relate and appreciate the Organisa and Commands, Platforms of the An Operational doctrines of international ar of military organisations of the national insight in the future technologies and st Drone Wars, Grey Zone Warfare to Fulls | tional Structure of Indian Armed forces: Ranks med Forces, Organisational structure and mies. Will gain comprehensive understanding and international arena. Will gain a futuristic rategies of warfare n domains like Cyber and | |
| Evaluation Method: Mid Semester Exam - 30 marks | Term paper and presentations) 20 marks | |

- Sessional Evaluation (Review Articles/Term paper and presentations) 20 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles to understand War Studies.

Course Content

UNIT 1: Concepts and definitions of War.

- Evolution of War: History, Concepts and definitions
- Types of War (Regular and Irregular Warfare)
- War Conventions and Legal Aspects of War..

UNIT 2: Theory of War & Simulation.

- The Escalation And Expansion of War, Rivalries & Arms Races, Territorial Integrity
- Bargaining Model of War, Economic Theories of War, Decision-making for War
- Introduction to Game-Theory, War-Gaming and Simulation

UNIT 3: Evolution & Future of Warfare

- Generations of Warfare Ancient, Modern and Contemporary Wars
- Grey Zone Warfare to Full spectrum warfare
- Space, Cyber, Drones & Future of Warfare.

UNIT 4: Organisational Structure and Doctrinal Strategies of Armed Forces

- Structure of Indian Armed forces: Ranks, Commands & Organisation.
- Platforms of the Armed Forces; Army, Navy, Airforce, Space and Cyber.
- Organisational structure and operational doctrines of international armies: UK, USA, China, Israel & Russia.

Reading list

- Kautilya's Arthashastra: Philosophy of Strategy, by Medha Bisht, Routledge India, 2020.
- The New Arthashastra: A Security Strategy for India, By Gurmeet Kanwal, SAGE, 2016.
- On War, by Carl Von Clausewitz.
- The Art of War, by Sun Tzu, Filiquarian, 2007.
- Strategy, by B.H Liddle Hart, Plume, 1991
- Influence of Sea power upon History, by AT Mahan, Dover Publications November 1, 1987.
- 33 Strategies of War, by Robert Green, Penguin Books, December 14, 2007.
- Strategic Studies: A critical Assessment, Modern Strategy, Strategy Bridge, Theory of Strategy, Air-Power for Strategic Aspect, Air-Power Advantage in Future Warfare: The Need for Strategy, Weapons for Strategic Effect: How important is Technology ?, The practice of strategy: From Alexander the Great to the Present, Nuclear Strategy and Strategic Planning, The leverages of Sea Power, Sea-power and Strategy, by Colin S Gray(collection)
- People, States and Fear, Strategic Studies Military Technology & International Relations, by Barry Buzan, ECPR Press, 2016.
- Strategy of conflict, by Thomas Schelling, Harvard University Press, 1981.
- Strategy: A History, by Lawrence Freedman, Oxford University Press, 2013.
- Security Studies, by Lawrence Freedman.

- The Clash of Civilization and the remaking of world order, by Samuel P Huntington.
- Alfred, David., (1953) Indian Art of War, Atma Ram , Delhi.
- Bajwa F.S., (1964) Military System of the Sikhs, Moti Lal, Banarsi Dass, Delhi.
- Bruce, George., (1969) Six Battles of India, Rupa & Company, Calcutta.
- Das, S.T., (1969) Indian Military Its History and Development, Sagar, New Delhi.
- Dikshitar, Ramachandra V. R. (1999) War in Ancient India. Cosmo, New Delhi.
- Fuller, J.F.C., (1958) Generalship of Alexander The Great, Natraj Publishes, Dehradun.
- Gustav Oppert, (1967) Weapons, Army Organisation and Political Maxims of Ancient Hindus, R.F Patel Rajratan Press, Ahmedabad.
- Kangle, R.P., (1963) Kautilya's Arth Shastra, University of Bombay, Mumbai.
- Majumdar, B.K., (1960) Military System in Ancient India, Firma K.L. Mukhopadhyoy, Calcutta.
- Majumdar, B.N., (1963) Study of Indian Military History. Army Educational Store, Delhi.
- Roy, Kaushik, (2004) From Hydaspes to Kargil: A History of Warfare in India from 326 BC to AD 1999. Manohar, New Delhi.
- Singh, Sarva Daman. (1997) Ancient Indian Warfare: With Special Reference to the Vedic Period. Motilal Banarsidass, New Delhi.
- Andreski S., (1968) Military Organization and Society, Univ. California Press, Berkeley.
- Anthony James Joes, (1996)Guerrilla Conflict before the Cold War, (Praeger Publishers,
- Aron R., (1966) Peace and War: A Theory Of International Relations, Praeger, New York.
- Barringer R., 1972) War: Patterns Of Conflict, MIT Press, Cambridge, Mass.
- Blainey G., (1973) The Causes Of War, Macmillan, London.
- Montgomery Viscount, (1983) A History of Warfare, William Morrow & Co, New York City.
- Mukherji and Shyam Lal, (1952) A Textbook of Military Science, Vol. II., Navayuga, New Delhi.
- Osanka, F.M., (1962) Modern Guerrilla Warfare, Free Press of Glencoe, New York.
- Sidhu, K.S., (1988) War and Its Principles, Atlantic, New Delhi.
- Tripathi, K.S., (1970) Evolution of Nuclear Strategies, Vikas, New Delhi
- Wright, Quincy, (1942) Study of War, University of Chicago Press.

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|--|
| Course Code | STS-441 |
| Course Type | Core |
| Credit | 02 |
| Contact Hours | 3 hours per week (including 1 hr consultation/tutorial) |
| | |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Human Values and Professional Ethics |

Course Description: The course has been developed to enhance personal skills of students. It will help them to improve interpersonal skills, team work abilities, leadership quality etc. In addition, it will also help them in progressing their communication skills and confidence that could further benefit them in facing any type of interviews for job or academic admissions.

Course Objective: The course aims to enable students: to develop competencies and capability, and to make them competent and confident. It will help students to bring positive changes in their behaviour and personality. It can also acquire employability skills, develops interpersonal communication, team building and leadership qualities.

On completion of the course students will be able to :-

LO 1 – Enhance their interpersonal skills in communication, negotiation, conflict resolution, anger management, etc. Students will be able to have better personality and team building capabilities. It further can support student in facing future job interviews in their career.

LO 2 – Develop leadership skills of the students. They will be able to comprehend the common mistakes of leadership and corrective measures to it. They can enhance their leadership style, and able to self-motivate themselves. Will be able to improve in creative thinking and problem solving qualities.

Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest

lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content

Unit 1: Interpersonal and Team Skills

- Interpersonal Communication (Assertive, Aggressive, Submissive)
- Confrontation, Conflict Resolution, Negations, Mediations, Arbitrations
- Personality and Personality Development
- Team Building, Team Skills

Unit 2:Leadership Quality Skills

- Leadership, Leadership Best Practices
- Successful Leadership, Leadership Mistakes
- Identifying Leadership Style, Change Management
- Self-Motivation Strategies, Problem Solving, Creative Thinking

<u>Readings List</u>

- Hurlock, E.B (2006). Personality Development, 28th Reprint. New Delhi: Tata Mc Graw Hill.
- Robbins, S.B.(2005). Organizational Behaviour. New Delhi: Prentice Hall of India.
- Pravesh Kumar (2005). All about self- Motivation. New Delhi: Goodwill Publishing House.
- Smith, B (2004). Body Language. Delhi: Rohan Book Company.
- Mile, D.J (2004). Power of positive thinking. Delhi: Rohan Book Company.

| Pre-requisites for the Course | Bachelors in any discipline and Curiosity to know about computers and digital world | |
|-------------------------------|---|--|
| Course Code | STS-442 | |
| Course Type | Compulsory | |
| Credit | 02 | |
| Contact Hours | 2 hours per week (including 1 hr consultation/tutorial) | |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) | |
| Relevance of course to | Local, National, Regional and Global level | |
| Relation to | Technological development in Digital World | |

Course Description: This is a M.A. level course which will introduce students to the fundamentals of the computer world from binary digits to storage, communication and latest emerging technologies.

Course Objective:

- 1. To Impart knowledge of computers' fundamentals to students.
- 2. To familiarize students with concepts of software, hardware, and communication systems.
- 3. To prepare students by giving hands-on experience on Office tools.
- 4. To teach students about the Internet and network technologies, the myths, and threats about the digital world and how to avoid them.
- 5. To make them aware of the emerging technologies in the computer world.

On completion of the course Students will be able to learn.

- 1. Basics of computers with very fundamental knowledge.
- 2. To differentiate types of software and applications.
- 3. About networking and communication mediums, the internet concepts etc.
- 4. To prepare documents, presentations, spreadsheets using office tools.
- 5. The emerging technologies in the digital world, possible threats, and avoidance.

Learning Outcomes:

| Outcomes | Disciplin e Specific Elective | Multidisciplina ry Elective | Skill Developme nt |
|----------------------------------|--|--------------------------------|--------------------------|
| Basic competency | Yes | Yes | Yes |
| Understanding capability | Yes | Yes | Yes |
| Knowled ge applicati on | Yes | Yes | Yes |
| LOTS to HOTS | Yes | Yes | Yes |
| Career choice | Yes | Yes | Yes |

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be

encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

| COURSE CONTENT / SYLLABUS | | |
|---------------------------|---|----|
| UNIT-I | Introduction to Computer | 18 |
| | Introduction to Number System Base Systems, Binary, Decimal, Octal, Hexadecimal etc | |
| | Logic Gates Representation Various gates for computers, OR, AND, NOR, NAND, XOR etc. Circuits of gates and their applications | |
| | Storage Media & Hardware Systems Types of storage devices, HDDs, SSDs, Pendrives etc. Processors, RAM, ROM | |
| | Types of Software | |
| | Application Software and System Software Definition, types of applications and systems software | |
| | Operating System Operating Systems, DOS commands, Windows, Linux, iOS etc. | |
| | Open Software Systems OpenOffice, Android and their applications | |
| | Data Storage Systems o File systems o Database Systems o Hands on practice on Microsoft Access | |

| UNIT-II | Communication | | |
|---|---|-------------|--|
| | Media Types communication media, cables, devices (Cables, Switches, Routers, Hub) Network and Internet Concepts Types of networks topologies and networks (LAN, MAN, WAN), Satellite networks, Wireless Networks, Bluetooth, Wi-Fi | | |
| | Microsoft Office | | |
| | Basics of Microsoft Word | | |
| | Basics of Microsoft Excel | | |
| | How to make Effective Presentation | | |
| | Internet Basics | | |
| History of Internet and WWW | | | |
| | Security Concepts in Network and Internet | | |
| | \cdot $% \left({{\mathbf{F}_{\mathrm{r}}}} \right)$ Various kind of security threats and techniques to avoid them | | |
| | Introduction to Emerging Technologies | | |
| | Artificial Intelligence & Machine Learning | | |
| | • Data Science | | |
| | • Big Data Analytics | | |
| | · IoT | | |
| | Cloud Computing | | |
| | | 30 Hours | |

References for Reading:

• Power point presentations by teacher

Second Semester

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-451 |
| Course Type | Core |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| | |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global |
| | level |
| Relation to | Gender, Environment & Sustainability, |
| | Human Values and Professional Ethics |

INDIA'S NATIONAL SECURITY

Course Description: National security has been the top priority agenda for India since its independence. India perceives threats from both internal and external dimensions. Externally, it has strategic issues with Pakistan and China. Internally, it also perceived threats from homegrown militancy, terrorism, organised crime, and illegal networks etc. On this backdrop, this course will introduce the national security scenarios of India, its security environment, threat concerns, and decision making process, along with wars fought in the past.

Course Objective: The main objective of the course is to introduce students the theory, concept, issues and concerns of national security. Learners will develop an understanding on internal/external security issues, and would be able to analyse varieties of threats perceptions of India. The initiatives and responses taken by government will be thoroughly discussed in the paper.

On completion of the course students will be able to :-

LO 1 – Understand the concept, theories and definition of national security in general and India specific. It also will make learners to be able to examine the national power system of major, middle and small countries.

LO 2 – Expertise on the environment and security structure of India. While understanding the internal and external security factors of the state, learners will get the opportunity to explore the role of India's higher defence organisation in the strategic framework of the nation.

LO 3 – Experiencing the security dynamics of India and its neighbouring states (Pakistan and China), the unit shall make learners to understand the nuclear issues evolving in the region. Students would also be able to understand about the disturbances occurring within the state affecting India's national security.

LO 4 – Apprehend about wars (WW1, WW2, 1947,1962,1965,1971,1999) fought with India's involvement. The role of security decision making bodies in Indian Government; media communities, and public institutes would be able to absorb from this unit. **Note: LO: Learning Outcome**

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks End Semester Exam - 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content

Unit 1 - Introduction to National Security

- National Security Concept, Definition and Theories
- National Power and its Components
- Security concerns of Major, Middle and Small powers

Unit 2 - India's Security Structure and Environment

- India's National Security Environment
- India's National Security Structure (Internal and External)
- India's Higher Defence Organisation

Unit 3 - India's Security Concerns, Nuclear Weapons and National Security

- India's Internal Conflict and National Security
- India-Pakistan, and India China relations and National Security
- Nuclear Weapons and National Security

Unit 4 - Wars and Decision-making bodies in India

- India's Wars WW1, WW2, 1947,1962,1965,1971,1999
- Cabinet Council on Security Affairs, NSC, NSCS
- Role of media and impact of public opinion on national security issues

<u>Reading List</u>

• Bajpai, Kanti (Ed.), *India's National Security: A Reader*, India: Oxford University Press.

- Harsh Pant, Ed. (2019), *India's Evolving National Security Agenda: Modi and Beyond*, Seattle: Konark Publishers, 2019.
- Baldwin, David, "The Concept of Security", *Review of International Studies*, 23, 1997, pp.5-26
- Ganguly, Sumit (2010), *India's Foreign Policy: Retrospect and Prospect*, London: Oxford University Press.
- Itty Abraham (1998), *The Making of the Indian Atomic Bomb: Science, Secrecy and the Postcolonial State*, New York: Zed Books.
- Russell, Wirtz (2008), *Globalisation and WMD Proliferation: Terrorism*, *Transnational networks, and International Security*, London: Routledge.
- Subramaniam, Arjun (2016), *India's Wars: A Military History, 1947-1971*, Harper Collins.
- Thapliyal, Uma Prasad (2018), *Military History of India*, Rupa.
- Raghavan, Srinath (2016), *India's War: The Making of Modern South Asia 1939-1945*, Allen Lane.

GEOPOLITICS AND MILITARY GEOGRAPHY

| Pre-requisites for the Course | Bachelors in any discipline | |
|-------------------------------|---|--|
| Course Code | STS-455 | |
| Course Type | Core | |
| Credit | 04 | |
| Contact Hours | 4 hours per week (including 1 hr consultation/tutorial) | |
| Course focussing on | Employability | |
| Relevance of course to | National, Regional and Global level | |
| Relation to | Professional Ethics | |

Course Description:

The course will explore some major (regional) conflicts and security challenges in both the Cold War and post-Cold war world, as well as assess the role of key (regional) powers and international actors in shaping the geopolitics and security regimes in a particular region.

Course Objective:

To provide students with an in-depth knowledge of international affairs and geopolitical phenomena. It enables students to use these concepts in real life so that they can develop critical skills to articulate and analyse global politics.

On completion of the course students will be able to :-

| Unit- 1 | LO 1 | Understand the concepts and theories of 'geopolitics' and learn how geopolitics is the product of its own time. |
|----------|------|---|
| Unit - 2 | LO 2 | Understand the foundations of Cold War geopolitics where ideology became one of the three main driving forces of these new geopolitical confrontations between the great powers. Explain the changing nature of geopolitics and its new geopolitical |
| | | environment. |
| Unit – 3 | LO 3 | Articulate the geopolitical interests of the major global players in today's international system and their implications on the regional and international politics. |
| Unit - 4 | LO 4 | understand the |

Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be

organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content Unit 1: INTRODUCTION TO GEOPOLITICS

- What is Geopolitics?
- The birth of geopolitics
- Geopolitical theories

Unit 2: GEOPOLITICS AND SECURITY DURING COLD WAR

- Beginning of the Cold War geopolitics and Changing nature of Geopolitics
- Foundational basis of the Cold War geopolitics
- End of the COld War and new geopolitcal environment and security Issues

Unit 3: MAJOR PLAYERS IN CONTEMPORARY GEOPOLITICS

- United States and European Union
- China and Russia
- India and other regional powers

Unit 4: MILITARY GEOGRAPHY AND TOPOGRAPHY OF INDIA

- Military geography: Meaning & concepts, Scopes and usages
- Elements of Military Geography
- Impacts of geography on land, sea and air warfare
- Topography and terrain analysis of Indian conflict zone

Readings (4 Units)

Unit 1 - Readings

- 1. Andrew Gyorgy, "The Geopolitics of War: Total War and Geostrategy", *The Journal of Politics*, Vol. 5, No. 4 (Nov., 1943), pp. 347-362.
- 2. Chapter 2: 'Survey of Geopolitics' of Saul Bernard Cohen's book *Geopolitics: The Geography of International Relations*, (Maryland: Rowman& Littlefield, 2009), pp- 15-35.
- 3. Chapter 1: "Framework for understanding geopolitics', of Colin Flint's book *Introduction to Geopolitics*, (New York: Routledge, 2006), pp: 1-32.
- 4. H. J. Mackinder (1904), 'The geographical pivot of history (1904),
- 5. Karl Haushofer (1942), Why Geopolitics?

- 6. Ladis K. D. Kristof (1960), 'The Origins and Evolution of Geopolitics', *The Journal of Conflict Resolution*, Vol. 4, No. 1, The Geography of Conflict(Mar., 1960), pp. 15-51.
- 7. M. Sprout, "Mahan: Evangelist Sea Power", pp. 415-445.
- 8. Sumida, J. (1999), "Alfred Thayer Mahan, Geopolitician." *Journal of Strategic Studies*, (22:2-3,) pp. 39-62.

Unit 2 – Readings

- 1. Chapter 4: 'The Cold War and Its Aftermath', of Saul Bernard Cohen's book *Geopolitics: The Geography of International Relations*, (Maryland: Rowman& Littlefield, 2009), pp- 65-94.
- 2. Chapter 6-14: of Gearóid Ó Tuathail, Simon Dalby and Paul Routledge (ed.), '*The Geopolitics Reader*', (London: Routledge, 1998), pp: 47-102.
- 3. "Churchhill's "Iron Curtain" Speech, "Sinews of Peace"," March 05, 1946, *History and Public PolicyProgram Digital Archive*, CWIHP archives.
- 4. David G. Hansen (1997), The Immutable importance of Geography, Parameter.
- 5. George F. Kennan (1947), ""The Sources of Soviet Conduct" *Foreign Affairs*
- 6. Geoffrey Warner (2013), 'Geopolitics and the Cold War', in Richard H. Immerman and Petra Goedde (ed.) '*The Oxford Handbook of the Cold War*',
- 7. George Kennan's 'Long Telegram'," February 22, 1946, *History and Public Policy Program Digital Archive*
- 8. Klaus Dodds (2003), 'Cold War Geopolitics', in John Agnew, Katharyne Mitchell, Gerard Toal (ed.), *A Companion to Political Geography*', (Blackwell Publishing Ltd).
- 9. Samuel P. Huntington, 'The Clash of Civilizations?', Foreign Affairs
- 10. Robert D. Kaplan (1994), 'The Coming Anarchy', The Atlantic
- 11. Walter Russell Mead (2014), 'The Return of Geopolitics: The Revenge of the Revisionist Powers*Foreign Affairs*, (May/June 2014).
- 12. Francis Fukuyama (1989), 'The End of History?', The National Interest (Summer 1989).

Unit 3- Readings

- 1. Richard K Betts and Thomas J Christensen, "The Rise of China: Getting the question right', in Robert J Art and Robert Jervis (ed.), 'International Politics:Enduring concepts and Contemporary Issues'.
- Chapter 7: 'Post-Cold War Geopolitics: Major Powers and Regions', of Bruce w. Jentleson's book 'American Foreign Policy: The Dynamics of Choice in the 21st Century', PP: 342- 399.

- 3. ManochehDorraj and James English, "China's Strategy for Energy Acquisition in the Middle East: Potential for Conflict and Cooperation with the United States," Asian Politics and Policy, 2012, Vol. 4 (2), pp. 173–191.
- 4. Saul Bernard Cohen's (2009), "Geopolitics: The Geography of International Relations", Maryland: Rowman& Littlefield.
- 5. Francis P. Sempa (2002), 'Geopolitics From the Cold War to the 21st Century', New Brunswick: Transaction Publishers.
- Ceorge J. Demko and William B. Wood (ed.) (1999), 'Reordering the World: Geopolitical Perspectives on the Twenty first Century', Oxford: Westview Press, 1999.
- 7. 'Global Trends 2025: A Transformed World', published by National Intelligence Council.

Unit 4 – Readings

- 1. Pettier Louis & E. Etze Percy, Military Geography, East West Publication, New Delhi, 1981.
- 2. J.N. Sarkar, Military History of India.

INDIA'S DEFENCE POLICY AND DEFENCE ECONOMICS

| Pre-requisites for the Course | Bachelors in any discipline | |
|-------------------------------|---|--|
| Course Code | STS-453 | |
| Course Type | Core | |
| Credit | 04 | |
| Contact Hours | 4 hours per week (including 1 hr consultation/tutorial) | |
| Course focussing on | Employability | |
| Relevance of course to | National, Regional and Global level | |
| Relation to | Professional Ethics | |

Course Description:

This course will make students to understand India's Defence Policy, economic theories of defence and India's Defence Budgeting and related issues. Students will be able to explore the structure of India's defence setup, defence budgeting, allocation of resources, and the defence planning and procurement process in India. They would be educated on India's defence production and mobilization of resources for military affairs. At the end of the course, the students would be able to understand the various aspects of India's defence policy.

Course Objective:

• To make student understand on India's defence policy, expenditure and economic aspects of military affairs

• To provide information on contours of defence budget and its planning process

• To make clear on India's defence production system

On completion of the course students will be able to :-

LO-1 Focusing on India's Defence Policy. Indian Military Forces: Commands, Theaterisation, Civil-Military Relations Jointness in the Indian Armed Forces, Military Strategy / doctrines and CAPF and other forces (Coast Guard, Intelligence Agencies etc.)

LO-2 Will discuss Economic Theories and Concepts of Defence Expenditures and Its Determinants and India's Defence Expenditure since Independence

LO-3 focusing on the topics India's Defence Budget, Planning and Defence v/s Development debate, Defence Production in India and Indian Defence Procurement Policy and Process

LO-4 Issues and Case studies Focusing on Economic Causes of War, Economic Warfare in modem times, Economic Problems of Post War reconstruction

Evaluation Method:

Mid Semester Exam - 30 marks

• Sessional Evaluation (Review Articles/Term paper and presentations) - 20 marks

• End Semester Exam - 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles to understand the topic and related issues

Course Content

UNIT 1:

India's Defence Policy

• Indian Military Forces: Commands, Theaterisation, Civil-Military Relations

• Jointness in the Indian Armed Forces, Military Strategy / doctrines

• CAPF and other forces (Coast Guard, Intelligence Agencies etc.)

UNIT 2: Economic Theories and Defence Expenditure

- Economic Theories and Concepts of Defence
- Defence Expenditures and Its Determinants

• India's Defence Expenditure since Independence

UNIT 3: Defence Budget and Defence Production

- India's Defence Budget, Planning and Defence v/s Development debate
- Defence Production in India
- Indian Defence Procurement Policy and Process

UNIT 4: Economic Aspects of War

• Economic Causes of War

• Economic Warfare in modem times

• Economic Problems of Post War reconstruction

Reading list

1.Harsh V. Pant, "Handbook of Indian Defence Policy: Themes, Structure and Doctrines, (New York: Routledge, 2016)

2. Ron Mathews, Defence Production in India (New Delhi: ABC, 1989)

3. Jasjit Singh, India's Defence Spending: Assessing Future Needs (New Delhi: Knowledge Publishers, 2001)

4. Y.Lakshmi, Trends in India's Defence Expenditure (New Delhi: ABC, 1988)

5. V.P. Malik and Vinod Anand, Defence Planning: Problems and Prospects (New Delhi: Manas, 2006)

6. Annual Reports of the Ministry of Defence, Government of India.

7. Amiya K Ghosh, Resource Allocation and Management in Defence: Need for

a Framework (New Delhi, Knowledge World Publishers, 2013)

8. Brauer, Jurgen and Hartley, Keith, The Economics of Regional Security" (New York, Routledge, 2013)

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-454 |
| Course Type | Core |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| | |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Environment & Sustainability, Human Values and Professional Ethics |

Course Description: This is a M.A. level course which will introduce students to the manner in which thinking about international security and conflicts have been impacted as a result of advances in science and technology. The course will focus on four areas namely, nuclear weapons and missiles, chemical and biological weapons and space. The manner in which these areas are governed in terms of treaties, agreements, technology control regimes and norms will also be discussed.

Course Objective: The course aims to enable students: To familiarize students with the how science and technology is shaped by the developments in technology. To introduce students to technological developments and advance in the areas of nuclear weapons and missiles, chemical and biological weapons and space and how it impacts thinking about security and conflicts. To appreciate the risks involved in handling complex technologies.

On completion of the course students will be able to :-

LO 1 – Comprehend the connections between science, technology and national security from the ancient to current time. Series of industrial revolutions and its implication to the society, along with the relevance of science and technology to India's national security could be able to understand by learners from this unit.

LO 2 – Understand the role of technology in warfare and the trends of revolution taking place in military affairs since late 1990s. Meanwhile, students would be able to examine the research and development taking place in the defence sectors globally. The complexities in the transfer of technologies, and criticalities in controlling the technologies shall be able to discuss by the learners.

LO 3 – Explore the roles of nuclear weapon in the international system. The concept of nuclear warfare, missile capabilities, and space security would be able to analysed by the learners.

LO 4 – Absorb the emerging threats of chemical and biological weapons, being using them by terrorist groups. Meanwhile, the new challenges of cyberspace, AI, Bitcoin, rare earths would be examine in the unit.

Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content

Unit 1: Science, Technology and National Security

- Science, Technology in Ancient times and impact on Security (Wooltz Steel, Mysore Rockets)
- Technological Changes from Industrial Revolution to Information Revolution
- Science, Technology, Society and Security, Complex Technologies and Risks involved
- Relevance of S&T to National Security

Unit 2: Science, Technology and Warfare

- Impact of Information Technology, RMA, and Impact of Technology on Warfare
- Research and Development in Defence Technologies
- Transfer of Technology and impact on National Security
- Export Control Regimes and control of Critical and Dual Use Technologies

Unit 3: Global Nuclear, Delivery Vehicles and Space Capabilities

- Drivers for pursuit of nuclear weapons
- Important concepts related to NW, Missiles other delivery vehicles and space capabilities
- Global Nuclear and missile capabilities
- Space Security and Global Space Capabilities

Unit 4: Emerging Threats for National Security

- Chemical and Biological Weapons
- Use of S&T by terrorist groups, WMD Terrorism, Social media and Impact on National Security
- Cyber threats to National Security
- New Challenges Artificial Intelligence, Bitcoin, Rare Earths

Readings (4 Units)

Unit 1 - Readings

- H.M. Iftekhar Jaim and Jasmine Jaim, 'War Rockets in India,' *Encyclopedia of the History of Science, Technology, and Medicine in Non-Western Cultures*, pp.1-4.
- Sharada Srinivasan and Srinivasa Ranganathan, *India's Legendary Wootz Steel: An Advanced Material of the Ancient World*, NIAS, Bangalore and IISc, Bangalore, November 2004.
- Alex Roland, *War and Technology: A Very Short Introduction*, Oxford University Press, (Chapter 1).
- Andrew F. Krepinevich, Cavalry to Computer: The Pattern of Military Revolutions', *The National Interest*, No. 37, Fall 1994, pp. 30-42.
- Warren Chin, 'Technology, War and the State: Past, Present and Future', *International Affairs*, Vol. 95, 4, 2019, pp. 765-783.
- Bourne, Mike, 2014, *Understanding Security*, Houndmills Basingstoke: Palgrave Macmillan. (Ch 1, Ch 2, and Ch 3)
- David Baldwin, 'The Concept of Security', *Review of International Studies*, Vol. 23, 1997, pp. 5-26.
- Eliot Cohen, "Technology and Warfare", in John Baylis et al *Strategy*, Oxford, 2002.
- Arnulf Grubler, *Technology and Global Change* (Two chapters, Cambridge, 1998)
- Charles Perrow, *Normal Accidents: Living with High-Risk Technologies*, Princeton: Princeton University Press. (Selections)

Unit 2- Readings

- Ranjit Ghosh, *Indigenisation: Key to Self-Sufficiency and Strategic Capability*, Pentagon Press, 2016.
- Lakshman K. Behra, Indian Defence Industry: An Agenda for Making in India, Publisher: Pentagon Press, 2016.
- Kevin A. Desourza, *Transfer of Defence Technology: Understanding the Nuances and Making it Work for India*, new Delhi: KW Publishers, 2019.
- Arun Vishwanathan, 'India's Defence Research and Development (R&D): Transitioning from 'Make in India' to 'Made in India''' *Synergy: A CENJOWS Journal*, December 2015, pp. 45-63.
- Sameer Patil and Arun Vishwanathan, India's approach to global export control regimes, *Seminar*, 731, pp. 36-39.

Unit 3- Readings

- Ranjit Ghosh, *Indigenisation: Key to Self-Sufficiency and Strategic Capability*, Pentagon Press, 2016.
- Lakshman K. Behra, Indian Defence Industry: An Agenda for Making in India, Publisher: Pentagon Press, 2016.
- Kevin A. Desourza, *Transfer of Defence Technology: Understanding the Nuances and Making it Work for India*, new Delhi: KW Publishers, 2019.
- Arun Vishwanathan, 'India's Defence Research and Development (R&D): Transitioning from 'Make in India' to 'Made in India''' *Synergy: A CENJOWS Journal*, December 2015, pp. 45-63.
- Sameer Patil and Arun Vishwanathan, India's approach to global export control regimes, *Seminar*, 731, pp. 36-39.

Unit 4 - Readings

- Charles Perrow, 2007, "Are Terrorists as Dangerous as Management? The Nuclear Plant Threat." In *The next Catastrophe: Reducing Our Vulnerabilities to Natural, Industrial, and Terrorist Disasters*, Princeton, NJ: Princeton University Press, pp. 132–73.
- Rossouw von Solms Johan van Niekerk, "From information security to cyber security", *Computers & Security*, Vol. 38, October 2013, Pages 97-102
- Lindsay, Jon R. 2013. "Stuxnet and the Limits of Cyber Warfare." Security Studies 22 (3): 365–404
- Myriam Cavelty Dunn. 2008. "Cyber-Terror—Looming Threat or Phantom Menace? The Framing of the US Cyber-Threat Debate." *Journal of Information Technology & Politics* Vol. 4, No. 1, pp. 19–36.
- Nabeel Mancheri, Lalitha Sundaresan and S. Chandrashekar, *Dominating the World: China and the Rare Earth Industry*, R. 19, Bangalore: national Institute of Advanced Studies, 2013.
- Sophia Kalantzakos, *China and the Geopolitics of Rare Earths*, OUP, 2017.

| Pre-requisites for the course | Bachelors in any discipline |
|-------------------------------|--|
| Course Code | STS-491 |
| Course Type | Core |
| Credit | 02 |
| Contact Hours | 2 hours per week (including 1 hour |
| | tutorial) |
| Course focussing on | Employability(Y/N), Entrepreneurship |
| | (Y/N), Skill Development (Y/N) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Communication, Basic Computer skill, |
| | Research skills& Report preparation |

COMMUNICATION AND COMPUTER SKILLS

Course Description: This is an M.A. level course which will introduce students to a gamut of knowledge of computer and communication skill. Considering the importance of skills to achieve employment course is designed to improve the communication and basic computer skills of students. It will support students to enhance communication and understanding abilities in English. At the same time, basic computer application will also be taught during the course which would be helpful to improve their elementary research skills in terms of study material collection [internet research], collation [data banking] and report preparation (writing skills) for respective subjects.

Course Objectives: The course aims to enable students: To inculcate students to comprehend the concept of Communication. To make students to build a repertoire of functional vocabulary and communication skills. To make students understand in the use of computer for academic activities. To make students capable enough to get adapted to any work environment.

On completion of the course students will be able to

LO 1- Communicate effectively

LO 2- Know basics of communication skill

LO 3- Remove barriers of effective communication

LO 4- Acquiring basic knowledge of computer orientations

LO 5 – Prepare report and presentation in presentable manner

Note: Lo: Learning Outcome

Evaluation Method:

Course Structure - M.A. Defence and Strategic Studies Revised in Sept 2023 | Applicable for admission from A.Y. 2023-24 onwards

Sessional Evaluation (Mid Semester Exam/Term paper & presentations) - 50 marks End-Semester exam - 50%

Teaching Methods:

The pedagogical approach would comprise classroom lectures accompanied with use of information and communication technology -Audio/videos wherever required. Lecture/s of eminent speaker/s of concerned area will also be organized as part of course time to time. Group discussions and presentations will be part of classroom teaching to enhance their potential to lead from front through effective communication and other skills. Students will be encouraged to do regular reading of authentic books, chapters of edited book, journal articles and to watch video lecture on topics related to communication and computer basics.

<u>Course Unit</u>

Unit 1: Communication Skills

- Spoken English Skills, Greeting, Self-introduction, Body Language, Verbal and Non-Verbal Communication
- Reading and Comprehension, Academic Writing Skills,
- Public Speaking and Presentation Skills

Unit 2: Computer Skills in Academics Activities

- E-Mail-Reading and Writing, Presentations
- Letter and Report Writing
- Role of Computers in Society and Security

<u>Readings (2 Units)</u> Unit 1 -Readings

- Sasikumar.V and P.V. Dhamija. (1993). *Spoken English: A Self-Learning Guide to Conversation Practice.* 34th Reprint. Tata McGraw-Hill. New Delhi
- V. Syamala, (2002). Effective English Communication for you. Emerald Publishers, Chennai.
- Hewings, Martin. 1999. Advanced English Grammar: A Self-Study Reference and Practice Book for South Asian Students. Reprint 2003. Cambridge University Press. New Delhi.

Unit 2 – Readings

- Introduction to Computers Peter Norton, Tata McGraw Hill
- Microsoft (2003) Jennifer Ackerman Kettell, Guy Hat-Davis, Curt Simmons, Tata McGraw Hill

DATA SCIENCE AND APPLICATIONS

| Pre-requisites for the Course | Bachelors in any discipline and Familiarity with Mathematics. Curious about playing with data | |
|-------------------------------|--|--|
| Course Code | STS-492 | |
| Course Type | Core | |
| Credit | 02 | |
| Contact Hours | 2 hours per week (including 1 hr consultation/tutorial) | |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) | |
| Relevance of course to | Local, National, Regional and Global level | |
| Relation to | Data Analysis, Decision making and Research | |

Course Description: This is a M.A. level course which will introduce students to the fundamentals of data science and various techniques to collect, analyse and make decisions based on the data.

Course Objectives:

- 1. To prepare graduates who can use their appropriate statistical skills in interdisciplinary areas such as finance, health, agriculture, government, business, industry, telecommunication, etc. As a result, they can pursue their future career in the field of data science.
- 2. To familiarize students with computational techniques and provide handson experience using appropriate tools.
- 3. To prepare students for undertaking case studies involving use of data science techniques in organizations/society.
- 4. To teach students to construct practical statistical models and provide decision making for the real-world processes.

On completion of the course Students will be able to learn.

- 1. Data collection, analysis, numerical measures and inference.
- 2. Various probability distributions and its applications
- 3. Hypothesis testing and its applications.
- 4. Basics of Linear Regression.
- 5. To obtain supporting evidence for data-based decisions and construct models for predicting future trends from data.

| Outcomes | Discipline Specific Elective | Multidisciplinary Elective | Skill Development |
|----------------------------------|------------------------------------|-------------------------------|----------------------|
| Basic competency | Yes | Yes | Yes |
| Understanding capability | Yes | Yes | Yes |
| Knowled ge applicati on | Yes | Yes | Yes |
| LOTS to HOTS | Yes | Yes | Yes |
| Career choice | Yes | Yes | Yes |

| Sr. No. | Торіс | No. of Lectures |
|---------|---|-----------------|
| 1. | Introduction to Data Science and Statistical Thinking 1: | 20 |
| | Examples of Statistical Thinking Basics of Statistics Frequency Distributions Different Types of Biases Numerical Measures of Data Probability and Probability Distributions | |

Course Structure - M.A. Defence and Strategic Studies Revised in Sept 2023 | Applicable for admission from A.Y. 2023-24 onwards

| | Conditional Probability and Bayes Rule | |
|----|--|----|
| 2. | Introduction to Machine Learning and AI and Statistical Thinking 2: | 10 |
| | Samples Sampling Methods and CLT Hypothesis Testing and testing techniques Chi-Square Testing Introduction to Linear Regression and Correlation Special Regression Models Time Series analysis and Forecasting | |
| | Total | 30 |

References for Reading:

- 1. Larry Wasserman's- All of Statistics: A Concise Course in Statistical Inference
- 2. Hastie, Tibshirani, and Friedman's -The Elements of Statistical Learning
- 3. David Barber's -Bayesian Reasoning and Machine Learning
- 4. Statistics for Data Science: Leverage the power of statistics for Data Analysis, Classification, Regression, Machine Learning, and Neural Networks by James D. Miller.
- 5. Practical Statistics for Data Scientists: 50 Essential Concepts by Peter Bruce , Andrew Bruce
- 6. Course Material given by the teacher.

Third Semester

INTRODUCTION TO NON-TRADITIONAL SECURITY

| Pre-requisites for the Course | Bachelors in any discipline | | |
|-------------------------------|--|--|--|
| Course Code | STS-522 | | |
| Course Type | OPTIONAL | | |
| Credit | 4 | | |
| Contact Hours | FIVE hours per week (including 1 hr consultation/tutorial) | | |
| Course focussing on | Employability (Y) Skill Development (Y) | | |
| Relevance of course to | National, Regional and Global Level | | |
| Relation to | Professional Ethics, Gender , Environment and sustainability, Human Values | | |

Course Description: This course introduces students to, contemporary discourses in security studies. While war remains as the central issue in international security, it is certainly not the only threat to survival, nor is peace synonymous with security. How does NTS relate to war and peace and is it necessary to have a link with conflict to be considered as security challenge. In this context the course attempt to discuss a wide variety of Non-Traditional Security (NTS) challenges/issues, along with different perspectives and policies regarding threats other than war.

Course Objective: The course aims to enable students to familiarize students with the Non Traditional Security Theories , Approaches and issues

On completion of the course students will be able to :-

LO-1 Will help the students to understand the following aspects of NTS-- Key concepts, Evolution of Non-Traditional Security and Major debates on Non-Traditional Security

LO-2 Will discuss the major theories /approaches of NTS- Securitization Theory and Human Security

LO-3 issues and Case studies Focusing Energy and Environment, Health and Infectious Diseases will be discussed in the unit

LO-4 Issues and Case studies Focusing on Migration and Refugees ,Terrorism and Transnational Crime will be covered

Evaluation Method:

Mid Semester Exam - 30 marks

- Sessional Evaluation (Review Articles/Term paper and presentations) 20 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles to understand NTS. Videos of Important lectures and Documentaries will be shown and discussed as part of the course

Course Content

UNIT 1: Introduction to Non-Traditional Security

- Key concepts and actors
- Evolution of Non-Traditional Security

Major debates on Non-Traditional Security

UNIT 2: Securitisation and Human Security

- Securitization Theory
- Human Security

UNIT 3: Issues in Non-Traditional Security

• Energy and Environment

Health and Infectious Diseases

UNIT 4: Issues in Non-Traditional Security

• Migration and Refugees

• Terrorism and Transnational Crime

Reading list

Alan Collins, "Introduction: What is Security Studies?" in Alan Collins (ed.), Contemporary Security Studies, New York: Oxford University Press, 2015. (Chapter 1)

• David Baldwin, "The Concept of Security," Review of International Studies, Vol. 23 (1997), pp. 5-26.

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• Andrew T. Price-Smith, "Theory and Exegesis" and "On Health, Power, and Security" in Contagion and Chaos: Disease, Ecology, and National Security in the Era of Globalization

• Roland Paris, "Human Security: Paradigm Shift or Hot Air?" International Security 26, no. 2(2001): 87-102

• MarliesGlasius, "Human Security from Paradigm Shift to Operationalization: Job Descriptionfor a Human Security Worker," Security Dialogue, 39, no. 1 (March 2008): 31-54.

• Holger Stritzel, "Towards and Theory of Securitization: Copenhagen and beyond," EuropeanJournal of International Relations 13, no. 3 (2007): 357-383.

• Tara Magner, "A Less than 'Pacific' Solution for Asylum Seekers in Australia,"International Journal of Refugee Law 16, no. 1 (2004): 53-90.

• Fiona B. Adamson, "Crossing Borders: International Migration and National Security,"International Security 31, no. 1 (2006): 165-199.

• Charles L. Glaser, "How Oil Influences U.S. National Security," International Security 38,no. 2 (2013): 112-146.

• Susanne Peters, "Coercive Western Energy Security Strategies: 'Resource Wars' as a NewThreat to Global Security," Geopolitics 9, no. 1 (2004): 187-212.

Frank Verrastro and Sarah Ladislaw, "Providing Energy Security in an Interdependent World,"The Washington Quarterly 30, no. 4 (2007): 95-104.
Daniel Deudney, "The Case Against Linking Environmental Degradation and

NationalSecurity," Millennium, Vol. 19, No. 3 (1990), pp. 461-476.

• Emily Meierding, "Climate Change and Conflict: Avoiding Small Talk about the Weather,"International Studies Review 15, no. 2 (2013): 185-203.

• Alex Evans, "Resource Scarcity, Climate Change and the Risk of Violent Conflict," WorldDevelopment Report 2011: Background Paper, World Bank (9 September, 2010),

URL:http://siteresources.worldbank.org/EXTWDR2011/Resources/6406082-1283882418764/WDR_Background_Paper_Evans.pdf

• "The 9-billion people question – A special report on feeding the world," The Economist, 26February 2011.

• Thomas F. Homer-Dixon, "Overview," in Environment, Scarcity, and Violence (Princeton, Princeton University Press, 1999), Chapter 2.

• Tara O'Toole, Michael Mair, Thomas V. Inglesby, "Shining Light on 'Dark Winter'," ClinicalInfectious Diseases 34, (1 April): 972-83

• Michael Kenney, From Pablo to Osama: Trafficking and Terrorists Networks, GovernmentBureaucracies, and Competitive Adaptation (University Park, PA: The Pennsylvania StateUniversity Press, 2007).

• Emmanuel Obuah, "Combating Global Trafficking in Persons: the Role of the United StatesPost-September 2001," International Politics 43, no. 2 (2006): 241-265.

• Charles Tilly, "War Making and State Making as Organized Crime," in Bringing the State BackIn, Peter Evans, Dietrich Rueschemeyer, and Theda Skocpol eds., (Cambridge: CambridgeUniversity Press, 1985).

• Brenda Lutz and James Lutz, "Terrorism" in Alan Collins (ed.), Contemporary SecurityStudies, New York: Oxford University Press, 2015. (Chapter 21). 37

• Marc Sageman, Leaderless Jihad: Terror Networks in the Twenty-First Century (Philadelphia, University of Pennsylvania Press, 2008)

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-523 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focusing on | Employability (Y/N), Entrepreneurship (Y/N), Skill Development (Y/N) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Gender, Environment & Sustainability, Human Values and Professional Ethics |

CONFLICT, SECURITY AND DEVELOPMENT

Course Description: The course explores the interconnections between conflict, security and development and how these manifests themselves in the wider context of globalization. Using theoretical frameworks from International Relations, Security Studies and Peace and Conflict studies, the course will introduce various debates surrounding the changing nature of violent conflict and international responses to it. It will cover issues such as security-development linkage, humanitarian intervention, security sector reform, democratization, good governance and state building. It critically analyses the role of diverse actors such as state and non-state actors, international institutions, aid agencies and others having a stake in the politics of peace and post-conflict reconstruction.

Course Objective: The course aims to help students understand the linkages between conflict, security and development. It discusses the challenges of conflict and post-conflict environment and develops awareness of concepts and theoretical approaches for understanding causes of conflict. It also examines the role of international actors in humanitarian intervention, peacebuilding and reconstruction.

On completion of the course students will be able to:

LO 1 – critically reflect on causes of conflict, understanding conflict patterns and trends

LO 2 – use concepts and theoretical approaches for case studies

LO 3 – develop awareness of tools of conflict mapping

LO 4 – develop insights into possible future scenarios and research in the field

Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The teaching method will include lectures and seminar presentations. The weekly session of four lectures (1 hour each) will introduce the

theme and key concepts to stimulate discussion and further reflection on the topic. Students will also be asked to make presentation on the assigned readings. This will be followed by group discussions to facilitate their engagement and explore further debates surrounding the topic. The lectures will focus on case studies and encourage students to discuss weekly topics through the perspective of a wide range of actors involved in conflict. Classroom interaction will also involve use of ICT tools such as power point presentations, guest lectures through skype, screening of documentaries/movies.

Course Content

Unit 1: Introduction – Understanding Conflict, Causes and Characteristics

- The New War Approach
- Fragile States and Security Dilemma
- Ethnic and identity conflicts
- Political Economy of Conflict

Unit 2: Global Governance and Security-Development Linkages

- Globalization and Security
- Liberal Peace
- Poverty and Violent Conflict
- Securitization of Aid

Unit 3: Conflict Management and Prevention

- Changing Nature of UN Peace operations
- Peace Enforcement and Responsibility to Protect
- Role of Regional Organizations
- Role of humanitarian and development actors

Unit 4: Post-conflict Stabilization and Reconstruction: Key Themes

- Peacebuilding, Statebuilding
- Security Sector Reform
- Democratization
- Gender, Human Rights and Justice

<u>Readings (4 Units)</u>

- Beswick, D. and Paul Jackson (2015). Conflict, Security, and Development: An Introduction. New York: Routledge.
- Stewart, F. (2004). Development and Security. *Conflict, Security& Development*, 4:3, 261-288
- World Bank (2011). *World Development Report* 2011: *Conflict, Security, and Development*. Washington: World Bank.
- Jacoby, T. (2008). Understanding Conflict and Violence: Theoretical and Interdisciplinary Approaches. London: Routledge.

- Kaldor, M. (2006). *New & Old Wars*. Cambridge: Polity
- Polity Collier, P. (2003). Market for Civil War, *Foreign Policy*, May/June, 39-45.
- Mueller, John (2000). The Banality of 'Ethnic War', *International Security*, 25 (1): 42-70.
- LeBillon, P. (2001). The political ecology of war: natural resources and armed conflicts. *Political Geography*, 20 (5): 561-584.
- Keen, D. (2012). Greed and grievance in civil war, *International Affairs*, 88(4): 757-777.
- Berger, M.T. and Heloise Weber (2009). War, Peace and Progress: Conflict, Development, (in)security and Violence in the 21st century. *Third World Quarterly*, 30(1): 1-16

Unit 2

- Richmond, O. (2008). *Peace in International Relations*. London: Routledge. Duffield, M. (2001). *Global Governance and the New Wars: The Merging of Development and Security*. London: Zed Books.
- Heathershaw, John (2008). Unpacking the Liberal Peace: The Dividing and Merging of

Peacebuilding Discourses, Millennium, 36: 597-621.

- Duffield, M. (2007). Development, Security and Unending War: Governing the World of Peoples. Cambridge: Polity
- Dillion. M and J. Reid (2000). Global Governance, Liberal Peace and Complex Emergencies. *Alternatives*, 25: 117-143.
- Dower, N. (1999). Development, Violence and Peace: A Conceptual Exploration. *European Journal of Development Research*, 11: 44-64.
- Hettne, B. (2010). Development and Security: Origins and Future, *Security Dialogue*, 41(1): 31–52.
- Duffield. M. (2002). Social Reconstruction and the Radicalization of Development: Aid as a Relation of Global Liberal Governance. *Development and Change*, 33(5): 1049-1071.
- Picciotto, R. (2004). Aid and Conflict: The Policy Coherence Challenge, *Conflict, Security and Development*, 4(3): 543-562
- Kavalski, E. (2008). The Complexity of Global Security Governance: An Analytical Overview, *Global Society*, 22(4): 423-443.
- Paris, R. (2001). Human Security: Paradigm Shift or Hot Air? *International Security*, 26 (2): 87-102.
- Watson, S. (2011). The 'human' as referent object?: Humanitarianism as securitization. *Security Dialogue*, 42(1): 3-20.

- Ayoob. M. (2004). Third World Perspectives on Humanitarian Intervention and International Administration. *Global Governance*, 10(1): 99-118
- Paris, R. (2014). The 'Responsibility to Protect' and the Structural Problems of Preventive Humanitarian Intervention, *International Peacekeeping*, 21(5): 569-603
- Mills, K. (2005). Neo-Humanitarianism: The Role of International Humanitarian Norms and Organizations in Contemporary Conflict. *Global Governance*, 11:161-83.

- Aleksovski, Stefan. Oliver Bakreski and M.A. Biljana Avramovska (2014). Collective Security – The Role of International Organizations – Implications in International Security Order. *Mediterranean Journal of Social Sciences* 5 (27): 274-282.
- Boehmer, Charles, Erik Gartzke, and Timothy Nordstrom (2004). "Do Intergovernmental Organizations Promote Peace? *World Politics* 57(1): 1-38.
- Bellamy, A.J. and Paul D. Williams (2009). The West and Contemporary Peace Operations, *Journal of Peace Research*, 46 (1): 39-57.

- Roland, Paris (2002). International peacebuilding and the 'mission civilisatrice', *Review of International Studies*, 28, 637-656
- Berger, M.T. (2006). From Nation-Building to State-Building: The Geopolitics of Development, the Nations-State System and the Changing Global Order. *Third World Quarterly*, 27(1): 5–25.
- Pugh, M. (2005). The Political Economy of Peacebuilding: A Critical Theory Perspective. *International Journal of Peace Studies*, 10 (2):23–42.
- Chandler, D. (2010). International Statebuilding: The Rise of Post-Liberal Governance. New York: Routledge
- Paris, R. and T. Sisk (eds.) (2009). *The Dilemmas of Statebuilding. Confronting the Contradictions of Postwar Peace Operations*. New York: Routledge.
- Hippler, J. (2008). Democratization After Civil Wars Key Problems and Experiences. *Democratization*, 15(3): 550-569.
- Heather, M. and Danielle Beswick. (2011). State Building, Security and Development: state building as a new development paradigm?*Third World Quarterly*, 32(10), 1703-1714.
- Pankhurst, D. (1999). Issues of Justice and Reconciliation in Complex Political Emergencies: Conceptualising Reconciliation, Justice and Peace. Third World Quarterly, 20 (1): 239-256
- Bloomfield, D. (2003) (Ed.)*Reconciliation After Violent Conflict: A Handbook* (Stockholm: International Institute for Democracy and Electoral Assistance.
- Cockburn, C. (2010). Gender Relations as Causal in Militarization and War. International Feminist Journal of Politics, 12(2): 139-157.
- Hagen, Jamie J. (2016). Queering Women, Peace and Security. International Affairs, 92 (2): 313–332
- Coomaraswamy, Radhika. (2015). Preventing Conflict, Transforming Justice, Securing the Peace: A Global Study on the Implementation of United Nations Security Council Resolution 1325. UN Women.

CHINA'S FOREIGN AND SECURITY POLICY

| Pre-requisites for the Course | Bachelors in any discipline | |
|-------------------------------|---|--|
| Course Code | STS-525 | |
| Course Type | Core | |
| Credit | 04 | |
| Contact Hours | 4 hours per week (including 1 hr consultation/tutorial) | |
| Course focussing on | Employability (Y) | |
| Relevance of course to | National, Regional and Global level | |
| Relation to | Professional Ethics | |

Course Description:

This course attempts to provide a comprehensive introduction to China's security and foreign policy. In particular, it will analyse China's rising role in international relations.

Course Objective:

To provide students with an in-depth knowledge of China's foreign and security policies in the post-Cold War international system. It familiarises the students with theories that enable them to identify the main objectives and priorities of Chinese foreign policy.

On completion of the course students will be able to :-

| Unit- 1 | LO 1 | Understand the determinants/source of China's foreign policy and its objectives and priorities in dealing with other major players in global politics. |
|----------|------|--|
| Unit – 2 | LO 2 | Investigate the source of conflict and cooperation in China's behaviour in the international arena. |
| Unit – 3 | LO 3 | Understand Chinese military capabilities and its grand strategy and strategic culture. |
| Unit – 4 | LO 4 | Understand the other priority areas of China's foreign and security policy. |

Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content

Unit 1: SOURCES OF CHINA'S FOREIGN POLICY AND RELATIONS WITH MAJOR COUNTRIES

- Sources of Foreign Policy
- China's Relations with major countries

Unit 2: CHINA'S TERRITORIAL DISPUTES

- Land and Maritime boundary disputes
- Chinese strategy to resolve territorial disputes with neighbours

Unit 3: CHINA'S STRATEGY, STRATEGIC CULTURE AND MILITARY CAPABILITIES

- China's Strategy and Strategic Culture
- Chinese Military Capabilities and Modernisation

Unit 4: CHINA'S TRADE & ECONOMIC RELATIONS

- Chinese growing economic power in International Relations
- China's economic initiatives at global stage

Readings (4 Units)

Suggested Readings

- 1. Andre Beaufre (1996), 'An Introduction to Strategy' Santa Barbara, CA Praeger: 19-50.
- 2. Alastair Iain Johnston (1995), "Cultural Realism: Strategic Culture and Grand Strategy in Chinese History". Princeton University Press.
- 3. Alastair Iain Johnston (1996), "Cultural Realism and Strategy in Maoist China", in Peter J. Katzenstein edited book 'The Culture of National Security: Norms and Identity in World Politics' New York: Columbia University Press: pp 216-270Harsh Pant, China Ascendant: Its Rise and Implications Ed., New Delhi: HarperCollins, 2019.
- 4. A. Doak Barnett (1978), 'China and the Major Powers in East Asia', Washington DC: Brookings.
- Colin S. Gray (1999), 'Strategic Culture as Context: The First Generation of Theory Strikes Back Review of International Studies, Vol. 25(1) (Jan., 1999), pp. 49-69
- 6. Davis Shambuagh (2013), 'China Goes Global: The Partial Power', Oxford: Oxford University Press.

- 7. David M. Lampton (2014), 'China's foreign policy,' Great Decisions , 2014, eat Decisions (2014), pp. 73-84.
- 8. Davis Scott, 'South Asia in China's strategic calculus,'
- 9. James Mann (1998), 'About Face: A History of America's Curious Relationship with China', New York: Alfred Knopf.
- 10. Harsh Pant (ed.) (2019), 'China Ascendant: Its Rise and Implications. Haroer Collins.
- 11. Marc Lanteigne (2020), "Chinese Foreign Policy: An Introduction," Routledge
- 12. MalikaTukmadiyeva (2013), 'Xinjiang in China's Foreign Policy toward Central Asia,' Connections , Vol. 12, No. 3 (Summer 2013), pp. 87-108.
- 13. Robert G. Sutter (2012), 'Chinese Foreign Relations : Power and Policy since the Cold War,' (3rd Edition), New York: Rowman and Littlefield
- 14. TilmanPradt (2016), 'China's New Foreign Policy Military Modernisation, Multilateralism and the 'China Threat'.
- 15. Abanti Bhattacharya (2013), 'China and its Peripheries: Strategic Significance of Tibet,' Institute of Peace and Conflict Studies.
- 16. Zhiqun ZHU (2011), "Chinese Foreign Policy: External and Internal Factors," China: an International Journal 9, 2 (SEPT. 2011): 185 194.

DISASTER MANAGEMENT

| Pre-requisites for the course | Bachelors in any discipline |
|-------------------------------|--|
| Course Code | STS-526 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hour |
| | consultation/ tutorial) |
| Course focussing on | Employability(Y/N), Entrepreneurship |
| | (Y/N), Skill Development (Y/N) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Environment, Atmosphere, Disaster, |
| | Government Relief Program |

Course Description: This is an M.A. level course which will introduce students to meaning, nature, definition and types of disasters .Further course attempts to provide a comprehensive introduction to types of disaster and disaster management, mitigation and recovery and reconstruction after disasters. This course aims at providing students with a comprehensive understanding of terminology and concepts used in the management of disasters and their relationship with each other

Course Objectives:

On completion of the course, the student will be able to: To Understand the concepts of disaster and disaster management in detail.

To have understanding about disasters - both natural and manmade and its impact on society and ecological systems. To acquire knowledge on policies and actions regarding preparedness, mitigation, relief and rehabilitation. To identify the organizations for managing disasters at the national, state and district levels.

On completion of the course students will be able to :

LO 1- Explain the salient features of man-made and natural disasters.

LO 2- Describe the implications of Chemical, Biological, Nuclear and other human induced disasters

LO-3- List various preparedness and mitigation measures for combating such manmade and natural disasters

LO 4- Identify the organizations for managing disasters at the national, state and district levels;

LO 5- Discuss the new initiatives with respect to the global developments.

Note : LO: Learning Outcomes

Evaluation Method:

Sessional Evaluation: (Mid Semester Exam/Term paper & presentations) – 50 Marks **End- Semester exam** - 50%

Teaching Methods:

The pedagogical approach would comprise classroom lectures accompanied with use of information and communication technology -Audio/videos wherever required. Lecture/s of eminent speaker/s of concerned area will also be organized as part of course time to time. Group discussions and presentations will be part of classroom teaching to enhance their knowledge in context to disaster and it's effective management. Students will be encouraged to do regular reading of authentic books, chapters of edited book, journal articles and to watch video lecture on topics related to disaster and it's mitigation.

<u>Course content</u>

Unit 1: Introduction to Disasters

- Disaster Management: Concept & significance
- Approaches to disaster management: Rationale, elements and objectives of disaster management.

Unit 2: Types of Disasters

- Dimensions and typology of Disasters Natural disasters
- Dimensions and typology of Disasters Manmade Disasters, Disaster in Cyber Space ,Business Continuity Planning

Unit 3: Risk Assessment and Mitigation

- Risk Assessment and Vulnerability Analysis: Understanding Risk, Hazard, Risk and Vulnerability, Vulnerability Identification and Analysis
- Disaster Management: Risk Reduction and Preparedness, Mitigation, Recovery and Reconstruction

Unit 4: Disaster Management in India

- National Disaster management policy- significance, principles and policy options.
- Understanding India's response to Disasters using Case Studies, People's participation n Disaster Management Program.

Readings (4 Units)

- Unit 1-Readings
- Coppola, P. Damon, (2006) Introduction to International Disaster Management, Elsevier.
- Garlake, Teresa, (2000) Dealing with Disasters, Oxfam Education, Oxford.
- Greenberg, Michael I., (2006) Encyclopaedia of Terrorist, Natural & Man-Made: Disasters Jones & Bartlett, United Kingdom.
- Goel S.L. and Ram Kumar, (2001) Disaster Management, Deep Publications Pvt. Ltd., New Delhi.
- **Unit 2-Readings** GoelCoppola, P. Damon, (2006) Introduction to International Disaster Management, Elsevier.
- Garlake, Teresa, (2000) Dealing with Disasters, Oxfam Education, Oxford.
- Greenberg, Michael I., (2006) Encyclopaedia of Terrorist, Natural & Man-Made: Disasters Jones & Bartlett, United Kingdom.
- Goel S.L. and Ram Kumar, (2001) Disaster Management, Deep Publications Pvt. Ltd., New Delhi.

Unit 3-Readings -

- Bourriau, Janine; (1992) Understanding Catastrophe; Cambridge University Press, Cambridge,.
- Carter, W. Nick., (1991) Disaster Management- A Disaster Manager's Handbook, A.D.B., Manila, Philippines.
- , S.L., (2006) Encyclopedia of Disaster Management, Deep and Deep, New Delhi.
- Marathe P. P., (2006) Concepts and practices in disaster management, Diamond Publications
- Narayan, B., (2000) Disaster Management, APH Publishing Corporation, New Delhi.

Unit 4-Readings -

- Pelling, Mark (2003) Vulnerability of Cities: Natural Disasters and Social Resilience, Earth Scan, London.
- Sharma V.K. (2013) Disaster Management, IIPA, New Delhi.
- Shaw, Rajib and R.R. Krishnamurthy, (2009) Disaster Management: Global Problems and Local Solutions, Universities Press.
- Singh, R.B., (2006) Natural hazards and disaster management: Vulnerability and Mitigation, Rawat Publications, Jaipur.
- Singh, Shailendra K, Kundu, Subhash C and Singh, Shobha, (1980) Disaster Management; Mittal Publications, New Delhi

INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEM (GIS)

| Pre-requisites for the Course | None |
|-------------------------------|---|
| Course Code | STS-527 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability, Entrepreneurship, Skill Development |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Geospatial Technology & Sciences |

Course Description: Geographic Information System(GIS) for Strategic Studies-Almost all earthly activities acquire dimensions of time, event and location. The all permeating and ubiquitous GIS technology has found its application in most of the areas that requires location based information and analysis. As such, it has also found its application within the subject of Strategic Studies. Strategic Studies - as a subject developed from the records, study and analysis of conduct and constructs of military campaigns and warfare over the past two centuries. The integration of Geo-Spatial technology in the realm of Strategic Studies provides a scope for understanding, analyzing and presenting the fast changing dimensions of modern day Strategic and Security environment. This course is designed to give fundamental knowledge and orientation for integrating Strategic Studies and GIS.

Course Objective:

- To learn and understand basics of Strategic Studies and Geographic Information System. As a result, they can pursue their future career in the field of Geo-Spatial technologies in their respective fields of education, expertise and interest.
- To teach spheres of influence and interest, concepts of military actions, alliances, dimensions of counter terrorism strategy. It would also include familiarizing with classical and contemporary strategic thoughts.
- To familiarize students with Geo-Spatial techniques and provide hands on experience using appropriate tools.
- To learn basics of Image interpretation methods and techniques.
- To prepare students for undertaking case studies involving use of Geo-Spatial and strategic studies elements.

On completion of the course students will be able to :-

• LO 1 – Basics of Geo-Spatial Techniques, Layers, Digitization, Vector and Raster Analysis concepts. User Interface QGIS, Geo-referencing, digitization, Feature Symbology and label tools, hot-spot generation (table based), Vector & Raster operations, Terrain analysis.

Describe the concepts of Geographic Information System (GIS).

- **LO 2** Understand and perform out basics of Remote Sensing and Satellite Image Interpretation.
- LO 3 Create map digitally & connect strategic studies related issues (through) case studies and its Geo-Spatial Analysis.
- **LO 4** Use various tools to collect and analyse data on military geography, map, remote sensing and will be able to apply areas of strategic studies and national security plotted with Geo-Spatial technologies for improving analysis and decision making.

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam / Term paper & presentations) - 50 marks (Assignments/Term Paper :20 Marks Mid- Semester exam : 30Marks)

End Semester Exam - 50 marks

Teaching Methods: Bulk of the teaching will take place through classroom lectures and interactions. Along with that they will be given practical knowledge of GIS software in the GIS Laboratory. For students, regular attendance and participation in the class are essential. Group and individual activities from student participants would supplement classroom engagement. Students are expected to participate actively in classrooms based on their critical understanding of assigned readings. 70% attendance is necessary for the end semester exam.

Course Content

Unit 1: Introduction to GIS

- Types of Maps and Projections, Scale, Coordinate Reference System
- Uses of GIS, Various types of data and layers
- Installing Plugins and Familiarising with QGIS software and Datasets

Unit 2

Vector Data and Analysis

- Create Point, Line, Polygon (P,L,P) shape files
- Digitize Point, Line, Polygon shape files Importing Spreadsheets data to add layer to P,L,P

Creating a Map and adding Layers

- Digitisation of Small Map, Clipping of Map
- Adding layers to Map, Adding Data to Map

- Finalising Map by adding scale and Legend
- Unit-3 Terrain Analysis
- Role of Military Geography in Strategic applications
- Evaluation and Geographical Battlegrounds, Major Battles in the World and India
- Impact of terrain on Grand Strategy, Operational and Tactical levels
- Terrain evaluation of Land, Sea, Air, Space
- Battle over mountains, peaks and passes, deserts, high grounds and jungle,
- oceans, rivers, canals, straits, Gulf/ bays, beaches, ports, etc.:

Raster Data Analysis.

- Types of Raster Data, Data Attribute
- DEM analysis
- Heatmap, Contour, Hillshade, slope, ruggedness index, trafficability index.

Unit 4: Remote Sensing and Image Interpretation for National Security.

- Basics of remote sensing, Discrete regions of the electromagnetic spectrum and their use in conducting spectral analysis. Concepts include spectral sensors and bands, different types of resolution, color composites.
- Types of Data PAN, Multi Spectral, Hyperspectral, SAR.
- Image Interpretation Techniques of satellite images.
- Image registration image-to-map registration, and image mosaic creation.
- Modelling in GIS
- Introduction to Photogrammetry, Interferometry.

Readings

- Kautilya's Arthashastra: Philosophy of Strategy, by Medha Bisht, Routledge India, 2020.
- The New Arthashastra: A Security Strategy for India, By Gurmeet Kanwal, SAGE, 2016.
- On War, by Carl Von Clausewitz.
- The Art of War, by Sun Tzu, Filiquarian, 2007.
- Strategy, by B.H Liddle Hart, Plume, 1991
- Influence of Sea power upon History, by AT Mahan, Dover Publications November 1, 1987.
- 33 Strategies of War, by Robert Green, Penguin Books, December 14, 2007.
- Strategic Studies: A critical Assessment, Modern Strategy, Strategy Bridge, Theory of Strategy, Air-Power for Strategic Aspect, Air-Power Advantage in Future Warfare: The Need for Strategy, Weapons for Strategic Effect: How important is Technology ?, The practice of strategy: From Alexander the Great to the Present, Nuclear Strategy and Strategic Planning, The leverages of Sea Power, Sea-power and Strategy, by Colin S Gray
- People, States and Fear, Strategic Studies Military Technology & International Relations, by Barry Buzan, ECPR Press, 2016.
- Strategy of conflict, by Thomas Schelling, Harvard University Press, 1981.

- Strategy: A History, by Lawrence Freedman, Oxford University Press, 2013.
- Security Studies, by Lawrence Freedman.
- The Clash of Civilization and the remaking of world order, by Samuel P Huntington.
- The Clash of Civilization and the remaking of world order, by Samuel P Huntington.
- Geographic Information Systems An Introduction, by Tor Bernhardsen
- An Introduction to Geographical Information Systems, by Ian Heywood
- Remote Sensing and Image interpretation by Thomas Lillesand, Ralph W. Keifer, Jonathan Chipman.
- GIS for Homeland Security, Mike Kataoka.
- Geographic Information Systems in Business, by James Pick.
- GIS based studies in the Humanities and Social Sciences, Editor Atsuyuki Okabe
- *Geographic Information System Basics"* by Jonathan E. Campbell, UCLA, Michael Shin, UCLA.
- Spoken Tutorial, QGIS, IIT Bombay, FOSSE Project, <u>https://spoken-tutorial.org/tutorial-search/?search_foss=QGIS&search_language=English</u>
- Geographic Information Systems (GIS), GIS Data, *MIT Libraries*, <u>https://libguides.mit.edu/gis</u>
- Alliance formation and national security, David Lalman & amp; David Newman, University of Maryland, Department of
- Government and Politics and Maryland Collective Choice Center , College Park, MD, 20742 Published online: 09 Jan 2008.
- International Interactions: Empirical and Theoretical Research in International Relations, Publication details,
- including instructions for authors and subscription information: http://www.tandfonline.com/loi/gini20.
- International Interactions: Empirical and Theoretical Research in International Relations
- Publication details, including instructions for authors and subscription information. http://www.tandfonline.com/loi/gini20.
- Bernard Loo, Geography and Strategic Stability, Published online: 17 Mar 2008. Journal of Strategic Studies,
- Publication details, including instructions for authors and subscription information: http://www.tandfonline.com/loi/fjss20.
- Grand strategy: the pursuit of power and the pursuit of plenty, Theodore H. Moran, International Organization, http://journals.cambridge.org/INO.
- In praise of strategy, Colin S. Gray, Review of International Studies http://journals.cambridge.org/RIS.
- The Future of Strategic Studies, Thomas G. Mahnken Published online: 17 Mar 2008, Journal of Strategic Studies,
- Publication details, including instructions for authors and subscription information: http://www.tandfonline.com/loi/fjss20.
- Threat and alignment behavior, Grace E. Iusi Scarborough & amp; Bruce Bueno de Mesquita, International Interactions, Empirical and Theoretical Research in

International RelationsPublication details, including instructions for authors and subscription information: http://www.tandfonline.com/loi/gini20

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-528 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Environment & Sustainability, Human Values and Professional Ethics |

Course Description: The course was designed keeping in mind the fact that terrorism has become a primary concern for the international community especially after the 9/11 terrorist attacks in the United States. It will make students to understand the important aspects of terrorism and counter terrorism occurring in different parts of the globe. After completing the course, the students will be able to understand the functioning of major terrorist organisation and the challenges they caused in global order.

Course Objective: The course aims to enable students: to understand concept, causes and effect of global terrorism; educate the functioning of major international terrorist organisation and global counter terrorism measures; analysis of terrorism as a major challenge for national and international security

On completion of the course students will be able to :-

LO 1 –Understand the concept, meaning and definitions of terrorism. Students would be able to analyse the activities, aims and objectives of global terrorist groups.

LO 2 – Examine how the world community respond to terrorism. The role of the United Nations, and initiative taken up by countries in bilateral/multilateral ways to control the menace. Meanwhile, other non-governmental organisation and media community's role in counter terrorism shall be acknowledged.

LO 3 – Would be able to analyse the proscribed groups functioning in various parts of India. The origins, activities, objectives and trends of each conflict zones would be able to analysed.

LO 4 – Examine how the state actors respond to the internal security of India. The role of the civil societies and media in containing the low intensity conflict in the region would also be understood.

Note: LO: Learning Outcome

Evaluation Method:

• Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks

• End Semester Exam - 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

| Course (| Content | |
|---|---|--|
| Unit 1 - I | Introduction to Terrorism | |
| Terrorism – Meaning, Definitions & Concept | | |
| • | Global Terrorist Groups: Aims and Objectives | |
| • | Strategies and Activities of Terrorist Organisations | |
| Unit 2 - (| Global Response to Terrorism | |
| • | Role of International Organisations – (United Nations and others) | |
| • | Bi/Multi-lateral Collaboration in counter terrorism | |
| • | Role of Media and Non-Governmental Organisations | |
| Unit 3 – Internal Security of India (origin, groups, objective, activity, trends) | | |
| • | Militancy in J&K and North-East | |
| • | Left-Wing Extremism and Rest of India | |
| • | Organised Crimes (Arms Smuggling, Drug and Human Trafficking, FICN) | |
| Unit 4 – Response to Internal Security | | |
| • | Role of State Actors | |
| • | Contribution of Civil Societies | |
| • | Role of Media | |
| L | | |

Reading List

Aubrey, Stefan M. (2004), The New Dimension of International Terrorism, Zurich: VDF

Bhatt, Ashok (2007), Global Terrorism, New Delhi: Lotus Press

• Freeman, Michael (2013), Financing Terrorism: Case Studies, New Delhi: Ashgate Publications

• Kaur, Kulwant (2005), Global Terrorism: Issues, Dimensions and Options, New Delhi: Kanishka Publishers

• Kay, Sean (2009), Global Security in the Twenty First Century: The Quest for the Search for Peace, USA: Rowman & Littlefield Publishers

Lutz, James M., Lutz, Branda J. (2013), Global Terrorism, New York: Rutledge

• Paranjpe, Shrikant, Internal Security in India: Issues, Structures, Approaches Ed., Mumbai: Indus Source Books 2014, for Nehru Centre, Mumbai.

• Paranjpe, Shrikant, Internal Security and Role of the State: Managing Conflicts in India, New Delhi: D.K. Publishers, 2019.

• Avasthi, Abha, Dimensions of Violence and Terrorism (Lucknow: Bharat Book Centre, 1998).

• Bhatnagar, V., Challenges to India's Integrity: Terrorism, Casteism, Communalism (Jaipur: Rawat Publications, 1998)

• Marwah, Ved, Uncivil Wars: Pathology of Terrorism in India (New Delhi: Harper Collins Publishers, 1999).

• Maroof Raza, Stephen P. Cohen, Confronting Terrorism, Penguin, 2009

• Arora, Subhash Chander, Strategies to Combat Terrorism (New Delhi: Har-Anand Publications, 1999)

• Karan, Vijaya, War by Stealth: Terrorism in India (New Delhi: Penguin Books, 1997)

• lliams and Dimitri Vlassis, Combating Transnational Crime: Concepts, Activities and Responses

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-529 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability (Y/N), Entrepreneurship (Y/N), Skill Development (Y/N) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Gender, Environment & Sustainability, Human Values and Professional Ethics |

Course Description: The European Union (EU) is a remarkable development of the post-second World War period. Reconciling national interests with pooled sovereignty in certain domains, the EU is a *sui-generis* (one of its kind) project. It represents a post Westphalian actor with the most advanced form of supranational governance inspiring efforts towards regional integration around the world. However, events like Iraq War, Eurozone crisis, Brexit and the migration crisis have put the integration project at crossroads. This course provides an overview of origins and evolution of the EU and its role as a global actor.

Course Objective: The course helps students think critically about the EU's role in global politics with focus on issue areas like security, trade, climate change etc. The course discusses EU's relations with major and emerging powers and aims to develop awareness on challenges facing the European integration project.

On completion of the course students will be able to:

LO 1 – understand the evolution of EU as a global actor

LO 2 – use different theoretical and methodological approaches to comprehend the institutional processes and policy making in the EU

LO 3 – develop analytical skills to study the EU's salience as a global actor in policy areas such as trade and development, security, peacebuilding and post-conflict reconstruction

LO 4 – to develop insights into possible future scenarios and research in the field Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The teaching method will include lectures and seminar presentations. The weekly session of four lectures (1 hour each) will introduce the theme and key concepts to stimulate discussion and further reflection on the topic. Students will also be asked to make presentation on the assigned readings. This will be followed by group discussions to facilitate their engagement and explore further debates surrounding the topic. Classroom interaction will also involve use of ICT tools

such as power point presentations, guest lectures through skype, screening of documentaries/movies.

Course Content

Unit 1: Introduction to the European Union

- History and evolution
- European Integration Theoretical approaches
 - Functionalism
 - Intergovernmentalism
 - Supranationalism
 - Multi-level governance

Unit 2: Conceptualizing EU as a Global Actor

- Civilian and Normative power
- Multilateralism and rules-based order
- EU as a security actor ESS (2003) and EUGS (2016)

Unit 3: EU Foreign and Security Policy: Key Issues

- Enlargement and neighbourhood
- Climate change and sustainable development
- Trade and connectivity
- Human rights and democracy promotion
- Migration

Unit 4: EU in a Multipolar World

- Future of Trans-Atlantic partnership
- EU's relations with China, Russia and UN
- India-EU Strategic Partnership

Readings (4 Units)

Unit 1

- Archer, Clive (2008). *The European Union*. London: Routledge.
- Warleigh-lack, Alex (2008). European Union: The Basics. New York: Routledge.
- Liesbet Hooghe & Gary Marks (2019). Grand theories of European integration in the twenty-first century. *Journal of European Public Policy*, 26:8, 1113-1133
- Maher, Richard (2019). International Relations Theory and the Future of European Integration, *International Studies Review*, 1-26.

- Manners, Ian (2002). Normative Power Europe: a Contradiction in Terms? *Journal of Common Market Studies*, 40(2): 235-258.
- Smith, Michael (2007). The European Union and International Order: European and Global
- Dimensions. *European Foreign Affairs Review*, 12(4): 437-456.
- Moravcsik, Andrew (2002). Reassessing Legitimacy in the European Union. *Journal of Common Market Studies*, 40: 603-624.
- Howorth, Jolyon (2010). The EU as a Global Actor: Grand Strategy for a Global Grand Bargain? *Journal of Common Market Studies*, 48(3): 455-474.
- Lucarelli,S. & I. Manners (2006) (Eds.), *Values and Principles in European Union Foreign Policy*.London: Routledge.

- Mälksoo, Maria (2016). From the ESS to the EU Global Strategy: external policy, internal purpose. *Contemporary Security Policy*, 37(3): 374-388.
- Howorth, Jolyon (2016). The EUGS: New Concepts for New Directions in Foreign and Security Policy. *International Spectator*, 51(3): 24-26.

Unit 3

- Oberthür, S. (2016). Where to Go from Paris? The European Union in Climate Geopolitics, *Global Affairs* 2: 2.
- Ash, Timothy Garton (2012). The Crisis of Europe: How the Union Came Together and Why It's Falling Apart. *Foreign Affairs*, 91(5): 2-15.
- Carbone, Maurizio (2007). *European Unionand International Development: The Politics of Foreign Aid*. London: Routledge
- Ceccorulli, Michela & Sonia Lucarelli (2017). Migration and the EU Global Strategy: Narratives and Dilemmas. International Spectator, 52(3): 83-102.
- Leblond, Patrick & Crina Viju-Miljusevic (2019). EU trade policy in the twentyfirst century: change, continuity and challenges. Journal of European Public Policy, 26(12): 1836-1846.
- Lisbonne de Vergeron, Karine (2018). The New Silk Roads: European Perceptions and Perspectives. *International Studies*, 55(4): 339-349.
- Singh, Manasi. 2016. EU's Democracy Promotion in the Neighbourhood: Renegotiating the Framework post Arab Spring. In Scott Nicholas Romaniuk and Marguerite Marlin (Eds). *Democracy and Civil Society in a Global Era*, New York: Routledge.

Unit 4

- Simón, L. (2015). Europe, the rise of Asia and the future of the transatlantic relationship.
- International Affairs, 91(5): 269-289
- Berkofsky, A. (2014). The European Union (EU) in Asian Security: Actor with a Punch or Distant Bystander? *Asia-Pacific Review*, 21(2): 61-85.
- Sachdeva, Gulshan (2014). EU–China and EU–India: A Tale of Two Strategic Partnerships. *Strategic Analysis*, 38(4): 427-431.
- Kirchner, Emil (2015). China and the EU as Global Actors: Challenges and Opportunities for Joint Cooperation. *Economic and Political Studies*, 3(1): 98-113.
- Casier, Tom (2016). From logic of competition to conflict: understanding the dynamics of EU–Russia relations. *Contemporary Politics*, 22(3): 76-394.
- Kavalski, Emilian (2016). The EU–India strategic partnership: neither very strategic, nor much of a partnership, *Cambridge Review of International Affairs*, 29:1, 192-208.
- Peters, Ingo (2011). Strategic Culture and Multilateralism: The Interplay of the EU and the UN in Conflict and Crisis Management. *Contemporary Security Policy*, 32:3, 644-666.

| Pre-requisites for the Course | Bachelors in any discipline and analytical thinking with problem solving skills | |
|---|---|--|
| Course Code | STS-530 | |
| Course Type | O-DSE | |
| Credit | 04 | |
| Contact Hours | 4 hours per week (including 2 hr practical session) | |
| Course focussing on Employability (Y), Entrepreneurship (Y), Skill Deve (Y) | | |
| Relevance of course to Local, National, Regional and Global level | | |
| Relation to | Data Analysis, Decision making and Research | |

COMPUTER PROGRAMMING (C AND C++)

Course Description: This is a M.A. level course which will introduce students to the fundamentals of programming using C and C++. Students will be able to learn problem solving approach using computer.

Course Objectives: To teach the students,

- 1. Computer programming basics.
- 2. Writing programs using C and C++ programming language.
- 3. The differences between syntax errors, runtime errors, and logic errors.
- 4. How to solve the problem using computer programming.

On completion of the course Students will be able to learn:

- 1. Design solutions to simple engineering problems by applying the basic programming principles of C/C++ language and basic mathematical knowledge.
- 2. To choose a suitable construct to develop code for a given problem.
- 3. To apply the C/C++ language syntax rules to develop simple programs to illustrate the applications of different data types such as arrays, pointers, functions.

| Outcomes | Disciplin | Multidisciplina | Skill |
|---------------|---------------------------|-----------------|-----------------|
| | e Specific Elective | ry Elective | Developme nt |
| Basic | | | |
| competency | Yes | Yes | Yes |
| Understanding | | | |
| Capability | Yes | Yes | Yes |
| Knowled | | | |
| ge | Yes | Yes | Yes |
| applicati | | | |
| on | | | |
| LOTS to HOTS | | | |
| | Yes | Yes | Yes |
| Career choice | Yes | Yes | Yes |
| | 162 | 162 | 162 |

| Unit No. | Торіс | Contact Hours |
|----------|---|------------------|
| | C Programming | |
| Unit 1 | Introduction to programming: What is programming? Different types of programming languages, algorithm, flowchart, structure of a C program, variables and data types, Character set of C, C tokens, operators, storage classes | 05 |
| Unit 2 | Control of Flow, User-defined Data types: Branching statements like simple if, ifelse, elseif , switch case, iterative statements like for, dowhile, while, break, continue, goto, arrays, strings, functions, structure and union Advanced Concepts of C Programming: Pointers, call by address, pointer arithmetic, pointer to pointer, Dynamic memory allocation, file management, the preprocessor, error handling | 25 |

Course Structure - M.A. Defence and Strategic Studies Revised in Sept 2023 | Applicable for admission from A.Y. 2023-24 onwards

| | C++ Programming | | |
|--------|--|----|--|
| Unit 3 | Object Oriented Programming Concepts: Classes, objects, abstraction, encapsulation, memory allocation for objects, member functions, instance variable, static keywork, const keyword, access specifiers, constructors, destructors, type casting, function overloading, creating memory dynamically | 20 | |
| Unit 4 | Inheritance in C++: Types of inheritance, function overriding, operator overloading, dynamic memory dispatch, virtual function, abstract function, abstract class, friend function, polymorphism, reference variable Advanced Concepts of C++ Programming: Working with files, exception handling, templates, basic introduction top standard template library | 10 | |

| 1 | How to Program C – Dietel & Dietel |
|---|---|
| 2 | How to Program C++ – Dietel & Dietel |
| 3 | Programming in C – E. Balagurusamy |
| 4 | Programming in C - Stephen Kochan |
| 5 | C Programming - Kernighan & Ritchie |
| 6 | Let Us C – Kanetkar |
| 7 | Object Oriented Programming with C++ – E. Balagurusamy |
| 8 | Programming in C++ - Bjarne Stroustrup |
| 9 | Object Oriented Programming in C++ - Robert Lafore |
| | |

INTRODUCTION TO RESEARCH METHODOLOGY

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|--|
| Course Code | STS-541 |
| Course Type | Compulsory |
| Credit | 02 |
| Contact Hours | 2 hours per week |
| | |
| Course focussing on | Employability, Entrepreneurship, Skill |
| | Development |
| Relevance of course to | National, Regional and Global level |
| Relation to | Professional Ethics |

Course Description: This is an M.A. level course which will familiarize students with the methods and tools of doing research in Social Sciences, Defence and Strategic Studies and International Relations (IR). The students will learn the nuances of research writing, data analysis (quantitative and qualitative), selecting and designing a research proposal including framing research questions and hypothesis, reviewing and critically analyzing the existing literature in the area.

Course Objective: The course aims to enable students: To identify a research area and research questions to be investigated; To collect data from online and offline databases; and to write a literature review and to write research proposal

On completion of the course students will be able to :-

LO 1 – identify a research area and research questions to be investigated

LO 2 – collect data from online and offline research databases

LO 3 – assimilate from various sources and write a literature review

LO 4 – write a research proposal

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam, preparation and presentation of Research Proposal) - 50 marks

End Semester Exam - 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include preparation of a research proposal and its presentation by the students. Students will be encouraged to do a regular reading of the important books and journals pertaining to the issue area. Students are also provided introduction and hands on training on important ICT Research Management tools in RM like EndNote, Zotero, Mendley.

Course Content

Unit 1: Introduction to Research Methodology

What is Research and Research Methodology

- Types of Research
- Inductive vs Deductive Method
- Introducing Positivism, Behaviouralism
- Hermeneutics, Falsification, Paradigm

How to prepare a Research Proposal

- Deciding Research Area/Focus
- Research Ethics and Plagiarism
- Collecting Data using Online and Offline Databases, Using ICT Tools for Citation (Zotero, Endnote)
- Literature Review
- Designing Research Questions and Hypothesis
- Unit 2: Quantitative and Qualitative Tools and Techniques in Social Science Research
- •
- Introduction to Quantitative Tools and Techniques in Social Science Research (Data and data collection, Designing and Selecting samples, Basics of statistical Tools and techniques to Analyse Data)
- Introduction to Qualitative Tools and Techniques in Social Science Research (Questionnaire, Field Work, Interviews)
- Field Trip

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• Essential Readings

- - Ranjit Kumar, Research Methodology: A Step by Step Guide for Beginners, Sage, 3rd Edition, 2011.
 - Stephen Van Evara, Guide to Research for Students of Political Science, Cornell: Cornell University Press, 1997.
 - McNabb David, Research Methods for Political Science: Quantitative and Qualitative Methods, Prentice Hall, New Delhi 2004.
 - John W Creswell, Qualitative Inquiry and Research Design: Choosing Among Five Approaches, Sage, 2nd Edition, 2007.
 - John W. Creswell, Research Design: Qualitative, Quantitative and Mixed Methods Approaches, Sage, 3rd Ed., 2009.
 - Howard Lune and Bruce L. Berg, Qualitative Research Methods for Social Sciences, Pearson, Ninth Ed., 2017.
 - Anselm Strauss and Juliet Corbin, Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 2nd Edition. Newbury Park, CA: Sage Publications, 1998.
 - N.L. Spoull, Handbook of Research Methods: A Guide for Practitioners and Students in the Social Sciences, 2nd Ed., Metuchen, NJ: Scarecrow Press, 1995.

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|--|
| Course Code | STS-544 |
| Course Type | Compulsory |
| Credit | 02 |
| Contact Hours | 2 hours per week (including 1 hr consultation/tutorial) |
| | |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Computer Science |

Artificial Intelligence and Applications

Course Description: This is a M.A. level course which will introduce students to the General familiarity with AI applications. Interest and curiosity for learning the concepts of AI development. This course does not require any programming or computer science expertise and is designed to introduce the basics of AI.

Course Objective:

- To familiarize students in AI applications who can then use it in their respective areas of interest for various practical applications. As a result, they can pursue their future career in the field of AI and ML.
- To make the students understand the definition and concepts of AI, its applications and use cases, and explain terms like machine learning, deep learning, and neural networks, AI computational techniques and methods with tools.
- To teach the students different types of Supervised and Unsupervised Learning.
- To prepare students for understanding issues, concerns and ethical considerations in AI.
- To provide the students with real world applications of AI.
- To familiarize the students with basic of Generative AI.

Learning Outcomes: On completion of the course students will be able to :-

• LO 1 – Fundamentals of AI and its applications. Comprehend the connections between AI and its applications. The continuous emphasis on the growth and development of AI and its implication to the science & society.

• LO 2 – To apply basic use of latest AI tools. Learn the use of tools in AI applications to understand the trends of revolution taking place in the realm of AI.

• LO 3 – To be aware of ethical & legal concerns and issues. Explore the importance of applying AI in areas of critical decision making. The importance of legal frameworks for present and future dependencies.

• LO 4 – How to use text and image based application of AI augmented solutions.

Absorb the latest techniques in emerging areas of text based and image based interpretation and classification. Become adept at the concepts & the challenges of AI in critical applications.

Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and take hands on practical lessons.

Course Content

Unit 1: Introduction to AI Applications

History of AI

Applications of AI,

Introductory Case Studies; AI in writing, music, and art \circ Emerging developments such as brain-computer interfaces.

Unit 2: Ethical issues and Considerations

AI, information transmission, information processing, and privacy

o Big data and privacy

o Big data and human identity

o Gender and cultural bias

Social Bias, Ethical issues for different strengths/grades of AI and AI algorithms, AI: the moral relevance and effects, Impact of bias and fairness on decision-making with AI, Human decisions and AI, Harms in AI solutions, Ethics of AI on the Web and in Web based applications.

Unit 3: Tools, Techniques & Types

- Introduction to ML
 Supervised vs. unsupervised learning
 Regression -- linear, logistic, ridge
 Classification decision trees, SVM, random forests
 Model evaluation
 Oimensionality reduction: PCA
 Clustering k-means,
 hierarchical clustering Neural networks and back-propagation
 Convolutional
 neural networks
 Recurrent neural networks and LSTMs
 Transfer learning,
 Image segmentation
 Edge and motion detection
 Object classification
 Intro
 to
 natural language understanding
 Machine translation
 Sentiment analysis,
 Transfer
 LSTM
 LSTM
 Sentiment
 August
 Sentiment
 August
 Sentiment
 August
 Sentiment
 August
 Sentiment
 August
 August
- Tensor Flow, IBM Watson, LISP.

Unit 4 : Introduction to Generative AI

- Define Generative AI
- Generative AI Model
- Generative AI Model Types
- Generative AI Applications

| Outcomes | Discipline Specific Elective | Multidisciplinar y Elective | Skill Developm ent |
|-----------------------------|------------------------------------|--------------------------------|--------------------------|
| Basic competency | Yes | Yes | Yes |
| Understanding Capability | Yes | Yes | Yes |
| Knowledge application | Yes | Yes | Yes |
| LOTS to HOTS | Yes | Yes | Yes |
| Career choice | Yes | Yes | Yes |

Evaluation:

In class participation: 20 %

Project Tasks: 30 %

Final exam: 50%

Readings (4 Units)

1. Handbook of Research on Applied AI for International Business and Marketing Applications, Tihana krinjari (editor), IGI Global, 2020.

2. Analyzing Future Applications of AI, Sensors, and Robotics in Society, Thomas Heinrich Musiolik; Adrian David Cheok, Engineering Science Reference, 2020.

3. The Age of AI: And Our Human Future, Henry A Kissinger (Author), Eric Schmidt (Author), Daniel Huttenlocher (Author), Little Brown and Company, 2021.

4. Artificial Intelligence Basics: A Non-Technical Introduction 1st ed. Edition

by Tom Taulli, APRESS, 2019.

5. Intelligence of Things: AI-IoT Based Critical-Applications and Innovations, Fadi Al-Turjman, Anand Nayyar Ajantha Devi, Piyush Kumar Shukla (eds.), Springer, 2021

6. Solving Problems by Searching," and "Chapter 5: Adversarial search" in Russell & Norvig, Artificial Intelligence: A Modern Approach, 2020

7.Russell & Norvig, Artificial Intelligence: A Modern Approach, 2020

8.C. Aggarwal, Chapter 9 "Unsupervised Learning" in Artificial Intelligence: A Textbook, 2021, Springer, file available on Canvas

9. Russell & Norvig, Chapters 20 and 22, "Learning Probabilistic Models" and "Reinforcement Learning" in Artificial Intelligence: A Modern Approach, 2020 o (optional) van Engelen, J.E., Hoos, H.H. A survey on semisupervised learning. Mach Learn 109, 373–440 (2020).

10.Nielsen, M. A., Chapter 1 "Using neural networks to recognize handwritten digits," in Neural Networks and Deep Learning, Determination

11. TensorFlow, "Image Recognition", July 30, 2018, https://www.tensorflow.org/tutorials/images/image_recognition

12. L. Fridman, "Human-Centered Autonomous Vehicle Systems: Principles of Effective Shared Autonomy", 3 Oct 2018,

INTRODUCTION TO CHINESE LANGUAGE – 1

| Pre-requisites for the Course | None |
|-------------------------------|---|
| Course Code | STS-542 |
| Course Type | Minor Elective (Compulsory) |
| Credit | 02 |
| Contact Hours | 3 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability, Entrepreneurship, Skill Development |
| Relevance of course to | National, Regional and Global level |
| Relation to | Professional Ethics |

Course Description: This is an introductory course in Chinese language. It familiarize students with elementary level of the language. Following the HSK Level 1 pattern, the course covers the basic reading and speaking of Chinese language. Thus in this course students will be introduced to basic structure of the language along with greetings and self-introduction.

Course Objective: By the end of this course, the students will:-

- Develop an ability to understand about basic 150 Chinese characters.
- Be able to express themselves in daily life circumstances.
- Be able to express themselves through proper pronunciation of 150 Chinese characters.

On completion of the course students will be able to :-

LO 1 – Express themselves in daily life circumstances.

LO 2 – Express themselves through proper pronunciation of 150 Chinese characters..

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks (Assignments/Term Paper :20Marks Mid- Semester exam : 30Marks)

End Semester Exam - 50 marks

Teaching Methods: Bulk of the teaching will take place through classroom lectures and interactions. For students, regular attendance and participation in the class are essential. Group and individual activities from student participants would supplement classroom engagement. Students are expected to participate actively in classrooms based on their critical understanding of assigned readings. 70% attendance is necessary for the end semester exam.

Course Content

UNIT -1: Listening Comprehension

• Introduction to listening and understanding basic Chinese characters

UNIT -2: Introduction to Reading Chinese Characters

- 150 most commonly used characters
- Basic Grammar patterns

<u>Readings</u>

- Alison Matthews and Laurence Matthews, Learning Chinese Characters HSK A, Tuttle, 2007.
- China Education Centre, HSK Online Practice Tests

INTRODUCTION TO FRENCH LANGUAGE – 1

| Pre-requisites for the Course | None |
|-------------------------------|---|
| Course Code | STS-543 |
| Course Type | Minor Elective (Compulsory) |
| Credit | 02 |
| Contact Hours | 3 hours per week (including 1 hr consultation/tutorial) |
| | |
| Course focussing on | Employability, Entrepreneurship, Skill Development |
| Relevance of course to | National, Regional and Global level |
| Relation to | Professional Ethics |

Course Description: This is an introductory course in French language. It familiarize students with elementary level of the language. Following the 'Common European Framework of Reference', the course covers A1.B level of French language. Thus in this course students will be introduced to basic structure of the language along with greetings and self-introduction.

Course Objective: The course aims to enable students will develop an ability to understand French sounds, greetings, and simple sentences. They will be able to express themselves in daily life circumstances. They will be able to express themselves through proper pronunciation of French Language.

On completion of the course students will be able to :-

LO 1 – understand and differentiate French sounds.

LO 2 – Greet and introduce in French language.

LO 3 – Express themselves in daily life circumstances.

LO 4 – Express themselves through proper pronunciation of French Language.

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks (Assignments/Term Paper :20Marks Mid- Semester exam : 30Marks)

End Semester Exam - 50 marks

Teaching Methods: Bulk of the teaching will take place through classroom lectures and interactions. For students, regular attendance and participation in the class are essential. Group and individual activities from student participants would supplement classroom engagement. Students are expected to participate actively in classrooms based on their critical understanding of assigned readings. 70% attendance is necessary for the end semester exam.

| Course Content | |
|------------------------------|--|
| UNIT -1: Premiers contacts | |
| Salutation | |
| • Se presenter | |
| Présenter les autres | |
| La description de la famille | |
| Du temps | |
| | |
| UNIT -2: Se communiquer | |
| Au restaurant | |
| Au magasin | |
| L'itinéraire/le voyage | |
| Ecrire un email en francais | |
| | |

Readings

- Francais.com, Clé Internationale, Paris, 2011
- A propos A1, Press Universitaire de Grenoble, Grenoble, 2010
- Regine Merieux & Yves Loiseau, Latitudes (A1/A2), Didier, Paris, 2008.

Fourth Semester

NATIONAL SECURITY AND INDIA'S FOREIGN POLICY

| Pre-requisites for the Course | Bachelors in any discipline |
|--|---|
| Course Code | STS-572 |
| Course Type | Core |
| Credit | 04 |
| Contact Hours | 4 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability |
| Relevance of course to National, Regional and Global level | |
| Relation to Professional Ethics | |

Course Description:

Foreign policy is a tool that a sovereign state uses to pursue its national interests in the international arena. This course aims at providing a comprehensive introduction to the key issues in India's foreign policy. It discusses the origins and determinants of India's foreign policy, the theory and practice of nonalignment, key episodes and trends in the history of India's foreign policy, the reasons for its transformation during the late-1980s and early-1990s, and the features of contemporary foreign policy. The course also covers key bilateral relations, regions, and issue areas and culminates with discussions on the enduring themes in India's relations with the world and the skill of analysing foreign policy.

Course Objective:

This course aims at providing a comprehensive overview of major issues and themes in India's national security and foreign policy. The course helps students become familiar with the policy and institutional frameworks, India's current engagement with major and emerging powers and the focus areas in its multilateral diplomacy.

On completion of the course students will be able to :-

| On completion of the course students will be able to :- | | | |
|---|------|---|--|
| Unit- 1 | LO 1 | Acquire a comprehensive understanding of the historical outlines of India's foreign policy. | |
| Unit – 2 | LO 2 | Become familiar with the enduring themes in India's foreign policy (relationships with its immediate and extended neighbours). Hence, they will be able to critically analyze Indian foreign policy responses to current geopolitical trends informed by history, ideas and traditions. | |
| Unit – 3 | LO 3 | Articulate India's emerging role in international institutions in both conflict and conflict resolution processes, and develop skills in foreign policy analysis. | |
| Unit – 4 | LO 4 | Understand the key challenges to contemporary Indian foreign policy, and develop insights into possible future scenarios and research in the field | |

Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content

Unit 1: Introduction, Structure and Determinants of India's Foreign Policy

- The meaning of foreign policy and its relation to national interest
- Determinants of India's foreign policy
- Institutions, Actors and Personalities in the Making of India's Foreign Policy (Parliament, Cabinet, Political parties, Pressure Groups, Foreign Policy Planning, Bureaucracy, Military, National Security Council); Personalities and Indian Foreign Policy (Jawaharlal Nehru to NarendraModi)

Unit 2: India's Foreign Relations

- India and South Asia: Major Issues and their implications for National Security
- Extended neighbourhood and National Security Implications: West Asia, Central Asia and South East Asia
- Key bilateral relations: United States, Russia, China, Japan, Israel, Africa

Unit 3: India and International Institutions

- India and the UN
- India and International Financial Institutions GATT, IMF, World Bank
- India and Regional Institutions BRICS, SCO, European Union, SAARC, BIMSTEC

Unit 4: Major Security Issues and India's Foreign Policy

- India's nuclear policy (PTBT, NPT, CTBT, MTCR, NSG, Wassenaar Agreement)
- Global issues climate change, international terrorism and security
- Diaspora and foreign policy

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Readings (4 Units)

Unit-1 readings

- Appadorai, A. (1949). 'India's Foreign Policy'. *International Affairs*, 25(1): 37-46.
- Ganguly, Sumit and Rahul Mukherji (2011). *India Since 1980*. New York: Cambridge University Press.
- Harshe, Rajan and K.M. Seethi (eds.) (2009). *Engaging with the World: Critical Reflections on India's Foreign Policy*. New Delhi: Orient Blackswan.
- Khilnani, S. et.al (2013). *Non-Alignment 2.0: A Foreign and Strategic Policy for India in the Twenty First Century*. New Delhi: Penguin.

Unit-2 readings

- Pant, H. (2019). *Indian Foreign Policy: The Modi Era*, New Delhi: Har Anand Publications, 2019.
- Chaudhuri, R. (2013). *Forged in Crisis: India and the United States Since 1947*. London: Hurst.
- Cohen, S. P. (2013). *Shooting for a Century: The India-Pakistan Conundrum*. Noida: HarperCollins Publishers.
- Garver, J. (2001). *Protracted Contest: Sino-Indian Rivalry in the Twentieth Century*. Seattle, W.A.: University of Washington Press.

Unit-3 readings

- Sidhu, W.P.S., P.B. Mehta and Bruce Jones (2013). *Shaping the Emerging World: India and the Multilateral Order*. Washington, D.C.: Brookings Institution Press.
- Malone, D., C. R. Mohan and S. Raghavan (eds.) (2015). *The Oxford Handbook of Indian Foreign Policy*. Oxford and New York: Oxford University Press.
- Michale, A. (2013). *India's Foreign Policy and Regional Multilateralism*. Palgrave Macmillan.

Unit-4 readings

- Menon. S.S (2016). Choices-Inside the Making of India's Foreign Policy. Brookings Institutions Press
- Pant, H. and Y. Joshi, *Indian Nuclear Policy*, Oxford: Oxford University Press, 2018.
- Rajagopalan, Rajesh (2013). 'Nuclear Weapons, Indian Strategy, and International Politics' in Navnita Chadha Behera (ed.) *India Engages the World*, New Delhi: Oxford University Press, 271-330.
- Abraham, I. (2014). *How India Became Territorial: Foreign Policy, Diaspora, Geopolitics*. Stanford, C.A.: Stanford University Press.

Suggested Readings

- Harsh Pant (2019), *Indian Foreign Policy: The Modi Era*, New Delhi: Har Anand Publications.
- Harsh Pant, Ed., *New Directions in India's Foreign Policy: Theory and Praxis,* Cambridge: Cambridge University Press, 2018.
- Harsh Pant and Yogesh Joshi, *Indian Nuclear Policy*, Oxford: Oxford University Press, 2018.
- Harsh Pant, *Indian Foreign Policy: An Overview*, Manchester: Manchester University Press; New Delhi: Orient Black Swan: 2016.
- Lal, Deepak. (1967). 'Indian Foreign Policy, 1947-64'. *Economic and Political Weekly*, 2(19): 879+881-883+885-887.
- Mehta, P.B. (2009). 'Still Under Nehru's Shadow? The Absence of Foreign Policy Frameworks in India'. *India Review*, 8(3): 209-233.
- Misra, K.P. (1981). 'Towards Understanding Non-Alignment'. *International Studies*, 20(1-2):23-37.
- Mohan, C. Raja (2003). *Crossing the Rubicon: The Shaping of India's New Foreign Policy*. New Delhi: Viking Books.
- Nehru, Jawaharlal. (1946/2012). *The Discovery of India*. New Delhi: Penguin Books.
- Noorani, A.G. (1979). India's Foreign Policy. *Asian Affairs*, 6(4): 231-242.
- ____ (1978). Foreign Policy of the Janata Party Government. *Asian Affairs*, 5(4): 216-228.
- Prasad, Bimal (1962). *The Origins of Indian Foreign Policy: The Indian National Congress and World Affairs, 1885-1947.* Calcutta: Bookland.
- Rajan, M.S. (1968-69). 'India and World Politics in the Post-Nehru Era'. *International Journal*, 24(1): 138-158.
- Rana, A.P. (1969). 'The Intellectual Dimensions of India's Nonalignment'. *The Journal of Asian Studies*, 28(2): 299-312.
- Khilnani, S. et.al (2013). Non-Alignment 2.0: A Foreign and Strategic Policy for India in the Twenty First Century. New Delhi: Penguin.
- Appadorai, A. (1981). *The Domestic Roots of India's Foreign Policy, 1947-1972*. Delhi: Oxford University Press.
- Dixit, J.N. (2004). *Makers of India's Foreign Policy*. New Delhi: HarperCollins.
- Keenleyside, T.A. (1980). Prelude to Power: The Meaning of Non-Alignment Before Indian Independence. *Pacific Affairs*, 53(3): 461-483.
- Rajan, M.S. (1997). *Recent Essays on India's Foreign Policy*. Delhi: Kalinga Publications.
- Harshe, Rajan and K.M. Seethi (eds.) (2009). *Engaging with the World: Critical Reflections on India's Foreign Policy*. New Delhi: Orient Blackswan.
- Raghavan, Srinath (2010). *War and Peace in Modern India: A Strategic History of the Nehru Years*. Ranikhet: Permanent Black.
- Thakur, Ramesh (1992). 'India After Nonalignment'. *Foreign Affairs*, 71(2): 165-182.
- Malone, David M. (2012). *Does the Elephant Dance?: Contemporary Indian Foreign Policy*. Oxford: Oxford University Press.
- Sidhu, W.P.S., P.B. Mehta and Bruce Jones (2013). *Shaping the Emerging World: India and the Multilateral Order*. Washington, D.C.: Brookings Institution Press.
- Abraham, Itty (2014). *How India Became Territorial: Foreign Policy, Diaspora, Geopolitics*. Stanford, C.A.: Stanford University Press.

- Chaudhuri, R. (2013). *Forged in Crisis: India and the United States Since 1947*. London: Hurst.
- Cohen Stephen P. (2013). *Shooting for a Century: The India-Pakistan Conundrum*. Noida: HarperCollins Publishers.
- Garver, J. (2001). *Protracted Contest: Sino-Indian Rivalry in the Twentieth Century*. Seattle, W.A.: University of Washington Press.

| Pre-requisites for the course | Bachelors in any discipline |
|-------------------------------|--|
| Course Code | STS-573 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hour consultation/ tutorial) |
| Course focussing on | Employability(Y/N), Entrepreneurship (Y/N), Skill Development (Y/N) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Cyber Space, Cyber security threats, Cyber Attack, Global initiatives |

CYBERSPACE AND NATIONAL SECURITY

Course Description: This is an M.A. level course which will introduce students to meaning, nature, definition and types of Cyber space . The course has been designed to introduce the contours of cyberspace to the students. The subject will focus on introduction to cyberspace and discuss the vulnerabilities in it. It will also explain how cyberspace can be protected through various mechanisms including laws and policies. In one of the chapters, the course will dedicatedly examine the situation of cyberspace in India.

Course Objectives:

• On completion of the course, the student will be able to: To Understand the concepts of cyber space. To understand/explore vulnerabilities in cyber space and implications on International Security. To Study the internal and external global cyber threats. To examine international and national cyber policies/laws and measures. To analyse the future challenges in global cyberspace

On completion of the course students will be able to : LO 1- Analyse complexities and uniqueness of cyber space/virtual world.

LO 2- Inculcate the understanding of various cyber security threats and their

consequences.

LO-3- Know technical and social aspects of cybercrimes.

LO 4- Network and collaborate with cyber security experts

LO 5- Analyse the world-wide approach regarding cyber-attacks.

Note: Lo: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/Term paper & presentations) - 50 mai End-Semester exam - 50%

Teaching Methods:

• The pedagogical approach would comprise classroom lectures accompanied with use of information and communication technology -Audio/videos wherever required. Lecture/s of eminent speaker/s of concerned area will also be organized as part of course time to time. Group discussions and presentations will be part of classroom teaching to enhance their knowledge in context to cyber space and related aspects. Students will be encouraged to do regular reading of authentic books, chapters of edited book, journal articles and to watch video lecture on topics related to cyber-attacks, crime and methods to mitigate cyber risks. And it's mitigation .

<u>Course content</u>

Unit 1 - Introduction to Cyberspace

- Defining cyber space, Information Security and CIIs
- Information Systems: Networks/LAN/WAN and Military Sensors
- Impact of Cyber Crimes in International Security(Citizen Security, Defence Sector, Finance (Banking) Divisions, Energy Segments, Transportation Facilities, Space Domain, Telecommunications

Unit 2 - Vulnerabilities in Cyberspace (Type of Cyber Aggression/Violence)

- Cyber Warfare (National Security Breach, Cyber Armies, Malware Attacks)
- Cyber Terrorism (Motivation, Recruitment, Training, Campaigning, Tools of violence) ,Cyber Espionage (Data thieft, cyber spies/machineries, Espionage Malwares/tools)
- Cyber Crimes (Hacking, Phishing, Defamation, Spam, Tresspass, Stalking)

Unit 3 - Securing Globalsyber Space (Role of International and National Bodies)

- Risk Identification, Levels of Protection and Defensive Measures
- Global Computer Emergency Response Team
- UN and other International Institutions

Unit 4 - Cyber Laws/Policies and Indian Cyber Security System

- Overview of Cyber LawsCyber Laws in US, Europe, China, Russia & Others
- Indian Cyber Security Policy and IT-Act ,ME&IT, DIT, CERT-In, NIC, etc
- Prime Minister Office (NCIIPC& NSCS); Ministry of Defence (CYBERCOM, DIARA, Defence-CERT, DRDO); Ministry of Home Affairs (CCTNS

Readings (4 Units)

Unit 1-Readings

• Franklin D. Kramer, Stuart H. Starr, Larry K. Wentz (ed), Cyberpower and National Security, Potomac Books Inc, 2009.

- Jeffrey Carr, Inside Cyber Warfare: Mapping the Cyber Underworld, O'Reilly Media, 2011.
- Goel S.L. and Ram Kumar, (2001) Disaster Management, Deep Publications Pvt. Ltd., New Delhi.

• Unit 2-Readings

- Garlake, Teresa, (2000) Dealing with Disasters, Oxfam Education, Oxford.
- Greenberg, Michael I., (2006) Encyclopaedia of Terrorist, Natural & Man-Made: Disasters Jones & Bartlett, United Kingdom.
- Goel S.L. and Ram Kumar, (2001) Disaster Management, Deep Publications Pvt. Ltd., New Delhi.

Unit 3-Readings -

- Jason Andress, Steve Winterfeld (ed), *Cyber Warfare: Techniques, Tactics and Tools for Security Practitioners*, Syngress, 2013.
- Greenberg, Michael I., (2006) Encyclopaedia of Terrorist, Natural & Man-Made: Disasters Jones & Bartlett, United Kingdom.
- Goel S.L. and Ram Kumar, (2001) Disaster Management, Deep Publications Pvt. Ltd., New Delhi.
- Unit 4-Readings Pelling, Mark (2003) Vulnerability of Cities: Natural Franklin D. Kramer, Stuart H. Starr, Larry K. Wentz (ed), Cyberpower and National Security, Potomac Books Inc, 2009.
- Jeffrey Carr, Inside Cyber Warfare: Mapping the Cyber Underworld, O'Reilly Media, 2011
- Goel S.L. and Ram Kumar, (2001) Disaster Management, Deep Publications Pvt. Ltd., New Delhi.

WEAPONS OF MASS DESTRUCTION (WMD) AND NATIONAL SECURITY

| Pre-requisites for the Course | None |
|-------------------------------|---|
| Course Code | STS-574 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability |
| Relevance of course to | National, Regional and Global level |
| Relation to | Environment & Sustainability, Human |
| | Values and Professional Ethics |

Course Description: This M.A. level course will introduce students to the debates around weapons of mass destruction. The course will study the reasons why states seek WMDs, nuclear weapons, chemical and biological weapons, nuclear deterrence, nuclear capabilities in the major nuclear weapons possessing countries and arms control and disarmament efforts.

Course Objective: The course aims to enable students to familiarize students with the science of nuclear weapons and nuclear power. To introduce students to reasons why states seek nuclear weapons. To familiarize the students with the nuclear capabilities in the major nuclear weapons possessing countries. To demonstrate the importance of norms and treaties in global efforts to control proliferation of nuclear weapons and eliminate nuclear weapons.

On completion of the course students will be able to :-

LO 1 – Describe science of nuclear weapons and nuclear power.

 $LO\ 2$ – Describe reasons why states seek nuclear weapons and what are the repercussions of WMDs.

LO 3 – Describe and analyse the importance of norms and treaties in global efforts to control proliferation of nuclear weapons and eliminate nuclear weapons.

LO 4 – Describe the various efforts made to control Arms race, Control Regimes and proliferation of WMDs.

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks (Assignments/Term Paper :20Marks Mid- Semester exam : 30Marks)

End Semester Exam - 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on deterrence and nuclear strategy. The students will be watching and discussing documentaries and movies about the Cuban Missile Crisis to appreciate the dangers associated with nuclear weapons

Course Content

Unit 1: Science of Weapons of Mass Destruction (WMD) and Risks Involved

- Introducing the Science behind Nuclear Energy and WMDs
 - Challenges for Avoiding proliferation
 - Effects of Nuclear, Chemical and Biological Weapons
 - Risks involved in dealing with Nuclear Energy and WMDs.

Unit 2: Proliferation of Weapons of Mass Destruction

- Major Drivers (Security related drivers, Domestic Politics related drivers, Norms and Prestige related drivers), Waltz and Sagan debate about 'Spread of Nuclear Weapons'
- Chemical and Biological Weapons
- Concept of Non-Proliferation and Major treaties (PTBT, NPT, CTBT, FMCT)
- Export Control Regimes (MTCR, NSG, Australia Group, Wassenaar Agreement)
- Chemical Weapons Convention and Biological Weapons Convention
- Terrorism and Nuclear Proliferation

Unit 3: Nuclear Strategy, Deterrence and Weapons of Mass Destruction

- Understanding the basic concepts of Nuclear Deterrence
- How has the nuclear strategy evolved in the nuclear age (Major Strategists and Writers on Nuclear Strategy)
- Capabilities and Doctrines of Nuclear Weapons Possessing Countries (NWS and India, Pakistan, Israel, North Kora)

Unit 4: Arms Control and Disarmament

- Arms Control and Disarmament Concepts, Objectives, Elements of Arms Control, Approaches to Arms Control and Disarmament
- Arms Control Under League of Nations, United Nations, Unilateral, Bilateral and Multilateral Approaches
- Nuclear Arms Limitation and Arms Control Treaties (ABM, SALT, START, INF etc.)
- Countries which have given up or ceased nuclear weapons programs (Former republics of FSU, South Africa, Libya and Iran)
- Nuclear Taboo and Nuclear Disarmament

| <u>Readings</u> |
|---|
| UNIT 1: Science of Weapons of Mass Destruction (WMD) and Risks Involved "How Do Nuclear Weapons Work?" Union of Concerned Scientists, Richard Rhodes and Denis Beller, "The Need for Nuclear Power," <i>Foreign Affairs</i>, Vol. 79, No. 1 (Jan Feb., 2000), pp. 30-44. |
| UNIT 2: Proliferation of Weapons of Mass Destruction Scott D. Sagan, 'The perils of proliferation: Organization theory, deterrence theory, and the spread of nuclear weapons', <i>International Security</i>, Vol. 18, No. 4, Spring 1994, pp.66-107. Scott D. Sagan, "Why Do States Build Nuclear Weapons?: Three Models in Search of a Bomb," <i>International Security</i>, Vol. 21, No. 3, Winter, 1996-1997, pp. 54-86. Kenneth N. Waltz and Scott. D. Sagan, <i>The Spread of Nuclear Weapons: A debate</i>, New York: W. W. Norton, 1995. (Selected Sections). Richard Price, "A genealogy of the chemical weapons taboo", <i>International Organization</i>, Vol. 49, No. 1, Winter 1995, pp. 73-103. Jonathan B. Tucker, "A Farewell to Germs: The US renunciation of biological and toxin warfare, 1969-70", <i>International Security</i>, Vol. 27, No.1, Summer 2002, pp. 107- 148. |
| UNIT 3: Nuclear Strategy, Deterrence And Capabilities Ward Wilson, <i>Five Myths About Nuclear Weapons</i>, Houghton Mifflin Harcourt, 2013. (Selected Sections). Lawrence Freedman, <i>The Evolution of Nuclear Strategy</i>, London: Macmillan Press Ltd, 1989 (Chapters - 1, 6, 9, 15, 16, 17). Jervis, Robert, <i>Perception and Misperception in International Politics</i>, Princeton: Princeton University Press, 1976. (Chapter 3). Scott D. Sagan, <i>Moving Targets: Nuclear Weapons and National Security</i>, Princeton, NJ: Princeton University Press, 1989. (Chapter 1). Jacques E. C. Hymans, <i>Achieving Nuclear Ambitions: Scientists, Politicians, and Proliferation</i>, Cambridge: Cambridge University Press, 2012. (Selected Sections). John Wilson Lewis and Xue Litai, China Builds the Bomb, Stanford: Stanford University Press, 1988, pp. 35-169 Wu Riqiang, "Certainty of Uncertainty: Nuclear Strategy with Chinese Characteristics," <i>Journal of Strategic Studies</i>, 2013, Vol. 36, No. 4, pp.579-614. Bhumitra Chakma, "Road to Chagai: Pakistan's Nuclear Programme, Its Sources and Motivations," <i>Modern Asian Studies</i>, Vol. 36, No. 4, 2002, pp. 871-912. Scott Sagan, "Evolution of Pakistani and Indian Nuclear Doctrine," in Scott Sagan Ed. <i>Inside Nuclear South Asia</i>, New Delhi: Foundation Books, 2011. Paul Kapur, <i>Dangerous Deterrent</i> (Sections will be identified) George Perkovich, India's Nuclear Bomb, California: Oxford University Press (Selected sections). "Draft Report of National Security Advisory Board on Indian Nuclear Doctrine,", <i>Ministry of External Affairs</i>, August 17, 1999, available at http://www.mea.gov.in/in-focus- |

article.htm?18916/Draft+Report+of+National+Security+Advisory+Board+on+ Indian+Nuclear+Doctrine

- "Cabinet Committee on Security Reviews Progress in Operationalizing India's Nuclear Doctrine," *Press Information Bureau*, January 4, 2003, available at <u>http://pib.nic.in/archieve/lreleng/lyr2003/rjan2003/04012003/r04012003</u>
 <u>3.html</u>
- Bharat Karnad, "The Irrelevance of Classical Nuclear Deterrence Theory," *India Review*, Vo. 4, No. 2, April 2005, pp. 173-213.
- Christopher R. Hill, "The Elusive Vision of a Non-Nuclear North Korea," *The Washington Quarterly*, 2013, Vol. 36 (2), pp. 7-19.

UNIT 4: Arms Control and Disarmament

- Emanuel Adler, "The Emergence of Cooperation: National Epistemic Communities and the International Evolution of the Idea of Nuclear Arms Control." *International Organization*, 1992, Vol. 46, 1, pp. 101-145.
- Francis J. Gavin,. "Blasts from the Past: Proliferation Lessons from the 1960s,"*International Security*, 2004, Vol. 29, 3, pp. 100-135.
- Nina Tannenwald, "The Nuclear Taboo: The United States and the Normative Basis ofNuclear Non-Use," *International Organization* 1999, Vol. 53, 3, pp. 433-468.

Course Structure - M.A. Defence and Strategic Studies Revised in Sept 2023 | Applicable for admission from A.Y. 2023-24 onwards

| Pre-requisites for the Course | None |
|-------------------------------|---|
| Course Code | STS-582 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability |
| Relevance of course to | National, Regional and Global level |
| Relation to | Environment & Sustainability, Human Values and Professional Ethics |

Introduction to Outer Space and Space Security

Course Description: This M.A. level course will introduce students to the concept of outer space and issues pertaining to space security. The course will begin with the definition of outer space, its importance in the lives of mankind, its exploration and security. This will further discuss the evolution of space programmes around the world, militarisation and weaponisation of the space and the global laws and policies pertaining to use of the outer space.

Course Objective: The course aims to enable students to familiarize students with the concept of outer space and its importance in our lives. At the end of the course students will be able to define the outer space, the concept of militarisation and weaponisation of the space. Students will be able to explain the history of exploration of space and its benefits humans are availing. Students will also be able to describe the various laws and policies formed on global level in order to use space for peaceful purposes.

On completion of the course students will be able to :-

LO 1 – Define the outer space and describe its importance in our lives.

LO 2 – Describe the evolution of space programmes and how it has impacted humans. **LO 3** – Describe and analyse the issues of militarisation and weaponisation of the outer

space.

LO 4 – Describe and analyse the importance of norms and policies pertaining to peaceful use of the outer space.

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks (Assignments/Term Paper :20Marks Mid- Semester exam : 30Marks)

End Semester Exam - 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be

organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on deterrence and nuclear strategy. The students will be watching and discussing documentaries and movies about the Cuban Missile Crisis to appreciate the dangers associated with nuclear weapons

Course Content

Unit 1: Understanding the Outer

- Introducing the Outer Space
- Importance of Outer Space in our lives
- Activities in the Outer Space

Unit 2: Evolution of the Space Programmes

- Major Drivers of Space Programmes
- Major events in the history of the Space exploration
- How these events have affected our lives

Unit 3: Space Security: Militarisation and Weaponisation

- Understanding the basic concepts of Space Security
- Difference between militarization and Weaponisation of the Space
- Contemporary issues related to the Space Security

it 4: Outer Space Law and other Treaties

- Outer Space Treaty: its provisions and impact
- Other Treaties on Space
- Contemporary issues and the Indian strategy

Readings

- Kai-Uwe-Schrogl, Peter L. Hays, Jana Robinson, Deniss Moura, Christina Giannopapa (2015) *Handbook of Space Security*.
- McDougall, Walter A. (1985), *The Heavens and the Earth: A Political History of the Space Age*. New York.
- Albert D. Wheelon (1988). "Space policy: How Technology, Economics and PublicPolicy Intersect" Working paper, MIT Program in Science, Technology and Society.
- Reynolds, Glenn H., and Robert P. Merges (1989), *Outer Space: Problems of Lawand Policy*. Boulder: Westview Press.

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INTERNATIONAL ORGANIZATIONS AND GLOBAL GOVERNANCE

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-576 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focusing on | Employability (Y/N), Entrepreneurship (Y/N), Skill Development (Y/N) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Gender, Environment & Sustainability, Human Values and Professional Ethics |

Course Description: The course examines the role and relevance of international organizations (IOs) and the major concepts and theoretical approaches to study IOs and assess their contribution in policy areas such as economic development, security, trade, environment, human rights and humanitarian assistance. It focuses on understanding global governance both as a paradigm and as an emerging field of inquiry in international relations. It explores what is meant by 'global', what is being governed, how and by whom.

Course Objective: The course helps students understand why states cooperate and create institutions to address collective action problems. It provides an insight into multilateral diplomacy through international institutions, regimes, transnational networks. The course introduces students to debates, challenges, the driving forces and processes, that characterize governance in an increasingly interconnected and politicized global context.

On completion of the course students will be able to:

LO 1 – understand the design and functioning of IOs and their interactions with states and other non-state actors

LO 2 – locate actors, sources of authority and identify challenges in global governance LO 3 – critically evaluate the process of decision-making at the global level in major policy domains

LO 4 – develop insights into possible future scenarios and research in the field Note: LO: Learning Outcome

Evaluation Method:

- Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) 50 marks
- End Semester Exam 50 marks

Teaching Methods: The teaching method will include lectures and seminar presentations. The weekly session of four lectures (1 hour each) will introduce the theme and key concepts to stimulate discussion and further reflection on the topic.

Students will also be asked to make presentation on the assigned readings. This will be followed by group discussions to facilitate their engagement and explore further debates surrounding the topic. Classroom interaction will also involve use of ICT tools such as power point presentations, guest lectures through skype, screening of documentaries/movies.

| Course | e Content | | | |
|---|---|--|--|--|
| Unit 1: | Unit 1: Introduction to IOs and Global Governance | | | |
| • | Historical evolution | | | |
| • | Definition, Typology, Roles and Functions | | | |
| • | Governance in a globalizing world | | | |
| Unit 2: Concepts and Theoretical Approaches | | | | |
| • | Realism and Liberal Institutionalism | | | |
| • | Regime Theory | | | |
| • | Functionalism and Neo-functionalism | | | |
| • | Multilateralism | | | |
| • | Power, IOs and Global Governance | | | |
| Unit 3: | Actors and Institutions in Global Governance | | | |
| • | The UN System – Evolution in a changing global context | | | |
| • | World Bank, IMF; WTO | | | |
| • | G20, BRICS | | | |
| • | Regional Organizations (EU, ASEAN, SAARC) | | | |
| • | Non-state Actors (Global Civil Society, Networks & Movements, NGOs, TNCs) | | | |
| Unit 4: | Global Governance and Role of IOs: Key Thematic Issues | | | |
| • | Collective security and use of force | | | |
| • | Peacebuilding and post-conflict reconstruction | | | |
| • | Trade, finance and development | | | |
| • | Human Rights and Human Security | | | |
| | | | | |

• Environment and Health

Readings (4 Units)

Unit 1

- Diehl, Paul F. (ed.) (2005). *Politics of Global Governance: International Organizations in an Interdependent World*, Boulder, CO: Lynne Rienner.
- Dingwerth, Klaus and Philipp Pattberg (2006). Global Governance as a Perspective on World Politics. *Global Governance*, 12: 185-203.
- Finkelstein, Lawrence (1995). What is Global Governance? *Global Governance*, 1(3): 367-372.
- Abbot, Kenneth and Duncan Snidal (1998). Why States Act through Formal Organizations. *Journal of Conflict Resolution*, 42: 3-32.
- Archer, Clive (2015). *International Organisations*, London: Routledge.
- Hurd, Ian (2018). *International Organizations: Politics, Law, Practice*, New York: Cambridge University Press.
- Karns, M. P. and Mingst, K.A. (2004). *International Organizations: The Politics and Processes of Global Governance,* Boulder, CO: Lynne Rienner.
- Reinalda, Bob (2009). *Routledge History of International Organizations: From 1815 to the Present Day*, London: Routledge.
- Craig, Campbell (2008). The Resurgent Idea of World Government. *Ethics* &*International Affairs*, 22 (2): 133-142.

Unit 2

- Keohane, Robert O. and Lisa L. Martin (1995). The Promise of Institutionalist Theory," *International Security*. ß20(1), pp. 39-51.
- Grieco, Joseph (1988). Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism. *International Organization*, 42(3): 485–507.
- Barnett, Michael N. and Martha Finnemore (1999). The Politics, Power, and Pathologies of International Organizations. *International Organization*, 53(4): 699-732.
- Ruggie, John Gerard (1992). Multilateralism: The Anatomy of an Institution. *International Organization*, 46(3): 561-598.
- Mearsheimer, John J (1994). The False Promise of International Institutions. *International Security*, 19(3): 73–91.

Unit 3

- Dutt, Sagarika (2012). The UN and Global Governance: Do Ideas Alone Help? *India Quarterly*, 68(2): 187-194.
- Kaldor, Mary (2003). The Idea of Global Civil Society. *International Affairs*, 79 (3): 583-593.
- George Weiss and Ramesh Thakur (eds.) (2010), *Global Governance and the UN: An Unfinished Journey*, Bloomington: Indiana University Press.
- Goodrich, Leland M. (1947). From League of Nations to United Nations. *International Organization*, 1(1): 3-21
- Cooper, Andrew (2010). The G20 as an Improvised Crisis Committee and/or a Contested 'Steering Committee. *International Affairs*, 86 (3): 741-757.
- Cronin, Bruce (2002). The Two Faces of the United Nations: Between Intergovernmentalism and Transnationalism. *Global Governance*, 8(1): 53-71.
- Hettne, Björn and Fredrik Söderbaum (2006), The UN and Regional Organizations in Global Security: Competing or Complementary Logics? *Global Governance*, 12(3): 227-232.
- Bexell, Magdalena; Jonas Tallberg and Anders Uhlin (2010). Democracy in Global Governance: The Promises and Pitfalls of Transnational Actors. *Global Governance*,16 (1): 81-101.

Unit 4

- Lipson, Michael (2007). Peacekeeping: Organized Hypocrisy? *European Journal* of International Relations, 13: 5-34
- Woodward, Scott (2012). The Responsibility to Protect: The Time is Now, *Mediterranean Quarterly*, 23 (3): 82-97.
- Woods, Ngaire (2007). *The Globalizers: The IMF, the World Bank, and Their Borrowers*, Ithaca: Cornell University Press.
- Ng N, Ruger J (2011). Global health governance at the crossroads. *Global Health Governance*, 3(2): 1-37.
- Lee, Kelly and Adam Kamradt-Scott (2014). The multiple meanings of global health governance: a call for conceptual clarity. *Globalization and Health*, 10 (28),
- Woods, Ngaire (2010). Global governance after the financial crisis: a New multilateralism or the last gasp of the great powers?. *Global Policy*, 1: 51-63.

• Newell, Peter (2008). The Political Economy of Global Environmental Governance. *Review of International Studies* 34 (3): 507-529.

INTELLIGENCE AGENCIES AND INDIA'S NATIONAL SECURITY

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-577 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| | |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Gender, Environment & Sustainability, Human Values and Professional Ethics |

Course Description: This course was designed for students to educate the important role of intelligence apparatus of India. The course will discussed the functioning of the intelligence of major countries with especial attention on India. This will discuss how information are collected from various sources and converted into intelligence inputs. This syllabus will also explain student how intelligence reports are writing with level of threats (read, orange and green) etc.

Course Objective: This course will be able to educate the objectives and functioning of India's intelligence communities from the academic perspective (not the statecraft). It will help learners to comprehend different types of intelligence organisations/units in India and their respective role to national security. Students will be able to analyse the way ahead and future trends of these security agencies.

On completion of the course students will be able to :-

LO 1 – Explore the history, concept and the role of India's intelligence agencies in national security. They will be able to comprehend the legal aspect associated with intelligence agencies.

LO 2 – Explore the dedicated intelligence organisations operating in India. Intelligence agencies operating under the military and central armed polices forces would be analysed. Meanwhile other intelligence set ups in civil organisation would also be discussed.

LO 3 – Examine the types of intelligence gathering system. How actionable intelligence are generated from a raw data, or a piece of information.

LO 4 – Understand the trend of intelligence studies in India and abroad. The benefits and the importance of this study. Student would be able to predict the future of intelligence setups in India.

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks End Semester Exam - 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles on theories of international relations.

Course Content

Unit 1: Introduction to Intelligence Studies and National Security

Understating the concept of intelligence and security studies History of Indian Intelligence, and National Security Laws (Secret Act) Basic role of Intelligence Organisation in securing India

Unit 2: Indian Intelligence Organisations

- India's Dedicated Intel Organisation: IB, R&AW, & NTRO
- Military and Central Armed Police Forces: Their Intelligence Units
- Other Intelligence setups: FIU, NCB, ED, MAC, JIC, etc.

Unit 3: Function and Sources of Intelligence

- Open Sources Intelligence (OSINT), Human Intelligence (HUMINT)
- Signal Intelligence (SIGINT), Communication Intelligence (COMINT)
- Imagery Intelligence (IMINT), Cyber Intelligence (CYBERINT)

Unit 4: Relevance of Intelligence Studies in Academic Realm and Social Sphere

- Intelligence studies at Universities and Think Tanks (case study of US, UK, Europe, Israel & Australia)
- Intelligence in Literature, Films, Media, etc.
- Future Trends of Indian Intelligence, and Exercise/Gaming

<u>Readings List</u>

1. V.K.Singh, India's External Intelligence, Manas Publications, New Delhi-2007.

- 2. B. Raman, The Kaoboys of R&AW: Down Memory Lane, Lancer Publishers, New Delhi-2007.
- 3. D.C. Pathak, Intelligence: A Security Weapon, Manas Publication, New Delhi, 2008
- 4. Maloy Krishnar Dhar, Intelligence Tradecraft: Secrets of Spy Warfare, Manas Publication, New Delhi, 2011
- 5. D C Nath, Intelligence Imperatives for India
- 6. Dr Bhashyam Kasturi, Intelligence Services Analysis, Organization And Function

MARITIME SECURITY AND GOVERNANCE

| Pre-requisites for the course | Bachelors in any discipline |
|-------------------------------|--|
| Course Code | STS-583 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 04 hours per week (including 1 hour |
| | tutorial) |
| Course focussing on | Employability(Y/N), Entrepreneurship |
| | (Y/N), Skill Development (Y/N) |
| Relevance of course to | Local, National, Regional and Global level |

Course Objectives: This course aims to provide students with a comprehensive understanding of the various aspects and dimensions of maritime security and the legal and policy frameworks that govern maritime activities. It provides an overview of the strategic context shaping the contemporary maritime space and various transnational risks and threats. It discusses a range of approaches and maritime security from defence, foreign policy and development perspectives. The course acquaints students with key actors and stakeholders involved in maritime governance and security.

On completion of the course students will be able to:

LO 1 – enhance their maritime domain awareness

LO 2 – a broad understanding of the law of the sea, ocean governance and maritime security

LO 3 – develop an in-depth understanding of challenges to India's maritime security and its potential role in the Indian Ocean and Indo-Pacific region

LO 4 – appreciate the principles of sustainability for conservation and long-term sustenance of secure seas

Note: Lo – Learning Outcome

Evaluation Method

• Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks

• End Semester Exam - 50 marks

Teaching Methods

The teaching method will include lectures and seminar presentations. The weekly session of four lectures (1 hour each) will introduce the theme and key concepts to stimulate discussion and further reflection on the topic. Students will also be asked to make presentation on the assigned readings. This will be followed by group discussions to facilitate their engagement and explore further debates surrounding the topic. Classroom interaction will also involve use of ICT tools such as power point presentations, online guest lectures, screening of documentaries/movies. Students will also be given exposure to using GIS tools and software to understand the maritime domain.

Course Content

Unit 1: Maritime Security and Strategy: Definition and Key Concepts

- Naval Warfare, Naval Power and Sea Lines of Communications (SLOCs)
- Foundations of Naval and Maritime Strategy: Alfred T. Mahan, Julian Corbett and K.M. Panikkar
- Sea Control and Sea Denial
- Maritime Domain Awareness

Unit 2: Maritime Territory and Boundaries: Basic Features, Principles and Purpos

- UN Convention on Law of the Sea (UNCLOS)
- Salience of Coastlines, Territorial Sea, Contiguous Zone
- Islands, Artificial Islands, and archipelago
- Exclusive Economic Zone
- Straits for International Navigation; Transit Passage, Innocent Passage

Unit 3: Maritime Governance: Issues and Challenges

- Coastal Patrolling, Policing and Surveillance
- Rights of Neighbours, Land-Locked & Geographically disadvantaged States
- Maritime Piracy, Terrorism, Human Trafficking and Smuggling
- Marine pollution
- Illegal, Unreported and Unregulated (IUU) Fishing

Unit 4: India's Evolving Maritime Domain

- India's Maritime Strategy
- Competition and Order in the Indo-Pacific
- India's Security Challenges in the Indian Ocean Region (IOR)
- India's Maritime Diplomacy

Readings

- Bueger, Christian. 2015. What is maritime security?. *Marine Policy*, 53, 159-164
- United Nations Convention on the Law of the Sea, 1982: A Commentary
- Stephens, Tim. 2015. *The Oxford Handbook of the Law of the Sea*
- Mahan, Alfred T. 1898. The Influence of Sea Power Upon History 1660-1783, Boston: Little, Brown and Company.
- Corbett, Julian S. 1918. Some Principles of Maritime Strategy. London, UK: Longmans, Green and Co.
- Till, Geoffrey. 2013. Sea Power : A guide for the Twenty-First Century, New York: Routledge.
- Hattendrof, John B. 2000 . "Sea Power and Sea Control in Contemporary times" in Naval History and Maritime Strategy: Collected Essays. Malabar, FL: Krieger Publications
- Indian Navy. 2015. Ensuring Secure Seas: India's Maritime Security Strategy.
- Mejia Jr. Maximo Q., Chie Kojima, Mark Sawyer (eds.). 2013. Piracy at Sea, Springer-Verlag, Berlin and Heidelberg, 2013
- Sridharan, K. 1965. *A Maritime History of India*, Ministry of Information and Broadcasting, Government of India.
- Le Mière, Christian. 2014. *Maritime Diplomacy in the 21st Century: Drivers and Challenges*, Routledge, Oxfordshire.
- Boșilcă, Ruxandra-Laura, Susana Ferreira and Barry J. Ryan (eds.) 2022. *Routledge Handbook of Maritime Security*, London.

| MILITARY HISTORY AND WARS IN INDIA | MILITARY | HISTORY | AND WARS | IN INDIA |
|------------------------------------|-----------------|---------|----------|-----------------|
|------------------------------------|-----------------|---------|----------|-----------------|

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-584 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Environment & Sustainability, Human Values and Professional Ethics |

Course Description: This course is carefully designed for students to understand the military history and wars which are fought in the Indian peninsula since ancient times. It will include the military structure of medieval and modern India along with wars fought with neighbours post its independence.

Course Objective: The course aims to understand the military history of India and analyse classical wars occurred in the subcontinents during different period of centuries.

On completion of the course students will be able to :-

LO-1 Will help the students to understand the military structure of Maurya and Gupta Empire, and the important wars fought during the period.

LO-2 Student will be able to comprehend the battles fought in the Medieval period and the role of Chola's Empire in the history of maritime affairs.

LO-3 It will enable learners to examine the military affairs of Modern India with special attention on important wars fought against British.

LO-4 Students will be able to identify the contours of various wars India fought with China and Pakistan.

Evaluation Method:

Mid Semester Exam - 30 marks

- • Sessional Evaluation (Review Articles/Term paper and presentations) 20 marks
- • End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles to understand Peace Studies. Important lectures and speeches by Galtung, Martin Luther king Jr. and the Movie 'Gandhi' will be shown and discussed during the course.

Course Content

UNIT 1: Military system and wars in Ancient India

- Maurya Military Structure (Kautilya's Arthashastra)
- Battle of Hydaspes-326 BC, and Kalinga War-261 BC
- Military structure of Gupta Empire

UNIT 2: Medieval India and Military Warfare

- Rajput Army (Battle of Tarrain-1191& 1192, and Chandawar-1194
- Chola Empire and Maritime Strategy; Mughal Invasion (Battle of Panipat-1526)
- Maratha Military Organisation (Shivaji's Guerrilla's Warfare and Naval Command)

UNIT 3: Modern India and War against British

- • Battle of Plassey (1757) and Buxar War (1764)
- • Tipu Sultan and the Anglo-Mysore War
- • Maharaja Ranjit Singh and the Anglo-Sikh wars (Battle of Ferozeshah-1845, and Chillianwala 1894)

UNIT 4: Post Independence and Wars in India

- • Indo-Pak war-1947/48, 1965, and 1971
- • India-China war-1962
- • Kargil Conflict-1999

Reading list

- Sarva Daman Singh, Ancient Indian Warfare: With Special Reference to the Vedic Period, Motilal Banarsidass Publishers, 1998
- Roy, Kaushik, From Hydaspes to Kargil: A History of Warfare in India from 326 BC to AD 1999, Manohar, New Delhi, 2004
- • Majumdar, B.N., Study of Indian Military History. Army Educational Store, Delhi, 1963
- V. R. Ramachandra Dikshitar, War in Ancient India Hardcover, Cosmo Publications, 1999
- • J.N. Sarkar, Military History of India
- • Thapliyal, Uma Prasad (2018), Military History of India, Rupa.
- Car H.C, Military History of India, Firma KLM Pvt. Ltd., Calcutta, 1980
- Surinder Kumar Bhakari, Indian Warfare: An Appraisal of Strategy And Tactics Of War In Early Medieval Period, South Asia Books, 1981
- • Roberts P. E., History of British India, Oxford University Press, 1952
- Arjun Subramaniam, India's Wars: A Military History, 1947-1971, HarperCollins, 2016
- V P Malik, India's Military Diplomacy, Harper, 2013
- • Srinath Raghavan, War and Peace in Modern India, Orient Blackswan, 2013
- • Srinath Raghavan, 1971: A Global History of the Creation of Bangladesh, Harvard University Press, 2013
- John Garver, China's Decision for War with India in 1962," in New Approaches to the Study of Chinese Foreign Policy, Robert S. Ross and Alastair Iain johnston, Stanford University Press, 2005.
- John Garver, Indian-Chinese Rivalry in Indochina," Asian Survey, Vol. 27, No. 1 (November 1987), pp. 1205-1219.

Course Structure - M.A. Defence and Strategic Studies Revised in Sept 2023 | Applicable for admission from A.Y. 2023-24 onwards

Introduction to West Asia

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-579 |
| Course Type | Optional |
| Credit | 4 |
| Contact Hours | FIVE hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global Level |
| Relation to | Professional Ethics, Human Values |

Course Description: This is a M.A. level course which seeks to introduce students to the concepts, history, conflicts and India's concerns and interests in the West Asian region.

Course Objective: The course aims to enable students to familiarize students with the terms and concepts used to delineate the region, Introduce students to the history of the region, Familiarize students with the major conflicts in the region and also to Highlight India's concerns and interests in the West Asian region.

On completion of the course students will be able to :-

LO-1 Will have an idea about West Asia region. Introduce geopolitical terminologies and issues of the region

LO-2 Provide a theoretical framework to the understand the West Asian region, its politics and history. Will help to understand the history of medieval empires of the region to post colonial nations and dominant nationalist/religious ideologies of the of the region

LO-3 Focusing on the major past and contemporary conflicts in the region and underlying causes and ideologies at play

LO-4 Will discuss the Indian west Asia relations in detail. Opportunities Challenges , compulsions, constraints of India's policies to the region will be discussed extensively

Evaluation Method:

Mid Semester Exam - 30 marks

- Sessional Evaluation (Review Articles/Term paper and presentations) 20 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles to understand the west Asian region. Important films on the region like *Lawrence of Arabia* and the *Ten Commandments* will also be shown and discussed during the course.

Course Content

UNIT 1: TERMS, CONCEPTS & APPROACHES TO HISTORY

- Issues: Terms: Middle East, Near East, West Asia
- Concepts: Orientalism

UNIT 2: WEST ASIA IN HISTORY AND IDEOLOGIES

History of the West Asian Region

- Ottoman and Persian Empires
- Rivalry Among European Powers and Emergence of the British as the Dominant Power
- Growth of Nationalism
- First World War and its impact on the region (Ottoman-German Alliance; Revolt by Sharif Husain of Mecca against the Ottomans; Balfour Declaration & Sykes-Picot Agreement; Disintegration of the Ottoman Empire)
- Creation of New Nation-States and struggle for Independence Ideologies
- Nationalism: Arab, Iranian and Turkish
- Pan-Islamism
- Zionism
- Bathism and Socialism
- Wahabism and Salafism

UNIT 3: CONFLICTS IN WEST ASIA

- Iran-Saudi Rivalry
- Israel-Palestine Dispute
- Iran-Iraq War

UNIT 4: INDIA AND THE CONTEMPORARY ARAB WORLD

- Historical Linkages between India and West Asia
- Nasser, Nehru and NAM, Suez crisis
- India and GCC
- Post-Cold War Era and Globalisation
- Challenges for India's West Asia Policy

Reading list

Carr, E. H., What is History? (Selected Sections).

Edward Said, Orientalism (Selected Sections).

George E Kirk, A Short History of the Middle East: From the Rise of Islam to Modern Times, New York: Methuen, 1955.

Ira M. Lapidus, A History of Islamic Societies, Cambridge: Cambridge University Press, 1988.

Beverley Milton-Edwards and Peter Hinchcliffe, Conflicts in the Middle East Since 1945, Routledge, 2008.

Gregory Hamas and Todd M. Ferry, The Palestine-Israel Coflict: A Basic Introduction.

S. Maqbul Ahmad, Indo-Arab Relations; an account of India's Relations with the Arab World from ancient up to modern times, (Selected Chapters)

Abhyankar, Rajendra M. (ed.) West Asia and the Region: Defining India's Role, New Delhi, Academic Foundation, 2008 (Selected Chapters)

Riyaz Punjabi and AK Pasha, (Eds.) India and the Islamic World, New Delhi: Radiant Publishers, 1998.

| Pre-requisites for the Course | Bachelors in any discipline |
|-------------------------------|---|
| Course Code | STS-585 |
| Course Type | Optional |
| Credit | 04 |
| Contact Hours | 5 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) |
| Relevance of course to | Local, National, Regional and Global level |
| Relation to | Environment & Sustainability, Human Values and Professional Ethics |

CORPORATE SECURITY AND RISK MITIGATION

Course Description: This course has been designed to provide students a comprehensive understanding and set of skills on the various aspects of security and risk management in the corporate world and business environment. It will help them to acquire the set of skills and knowledge which are necessary to effectively protect an organization's people, assets, and reputation of a business.

Course Objective: It will not only provide an opportunity for student employability, but would enhance the theory and practice of industrial security systems. To introduce students the business world and its (corporate) security system, threat assessment and risk management structure. To provide information on contours of physical and information security along with emergency management skills. To enhance ability for investigation and intelligence aspect of corporate sector. To comprehend ethical and legal issues of the corporate professionals, and enhance leadership and management skills

On completion of the course students will be able to :-

LO-1 Will help students to understand the concept of corporate security and developing strategies for risk mitigations.

LO-2 Student will be able to comprehend the protective mechanism of industries and response mechanism in time of crisis (both in physical and information domain).

LO-3 It will enable learners to understand the emergency management mechanism and intelligence gathering methods along with investigation skills in the industrial sectors.

LO-4 Students will be able to understand about the leadership skills, compliance of industrial ethics/values, and legal matters of the corporate societies.

Evaluation Method:

Mid Semester Exam - 30 marks

- Sessional Evaluation (Review Articles/Term paper and presentations) 20 marks
- End Semester Exam 50 marks

Teaching Methods: The pedagogical approach would involve classroom lectures accompanied with use of power points and videos wherever required. Special guest lecture (through ICT tools like Skype and in person) by experts in the field will also be organised as part of the course from time to time. Classroom teaching will also include group discussion and presentations by the students. Students will be encouraged to do a regular reading of the important books, book chapters and journal articles to understand Peace Studies. Important lectures and speeches by Galtung, Martin Luther king Jr. and the Movie 'Gandhi' will be shown and discussed during the course.

Course Content

Unit I: Introduction to Corporate Security and Threat Assessment

- Concept, Objectives, and Role of Cooperation Security
- Identifying and assessing potential threats and risks
- Developing & implementing strategies for risk mitigation

Unit II: Physical Security and Information Security

- Access control, perimeter protection, surveillance
- Data protection, access control, encryption
- Response planning and Incident response mechanism

Unit III: Emergency Management, Investigation and Intelligence

- Crisis management, business continuity, and disaster recovery
- Principles and techniques of investigation, Intelligence gathering
- Criminal investigation, cybercrime, and fraud detection

Unit IV: Ethics/Legal Issues and Leadership Skills/Management

- Ethical and legal matters for corporate security
- Privacy, compliance, and liability
- Security professionals skills (team building, communication, and strategic planning)

Readings

- 1. SEC (2017), A Brief Introduction to the Value of Corporate Security for Non-Security Professionals
- 2. Edward Halibozek and Gerald L. Kovacich, The Manager's Handbook for Corporate Security: Establishing and Managing a Successful Assets Protection Program
- 3. Justin Crump, "Corporate Security Intelligence and Strategic Decision Making"
- 4. SLRI Report (2021) "Corporate Security Organizational Structure, Cost of Services and Staffing Benchmark"
- 5. Julian Talbot and Miles Jakeman (2009)"Security Risk Management Body of Knowledge"
- 6. Marko Cabric (2015), "Corporate Security Management: Challenges, Risks, and Strategies"

Computer Programming Project / Internship Field Report

| Pre-requisites for the Course | Bachelors in any discipline | |
|-------------------------------|---|--|
| Course Code | STS-594 | |
| Course Type | Optional | |
| Credit | 02 | |
| Contact Hours | 2 hours per week | |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) | |
| Relevance of course to | Local, National, Regional and Global level | |
| Relation to | Environment & Sustainability, Human Values and Professional Ethics | |

The students will be allotted either a Computer Programming Project / Internship Field Report.

In the computer programming project, based on their earlier courses on the related topics like C&C++ etc. the student will have to execute a demonstrable project under the guidance of the faculty member.

In case of internship, field report, the student has to do a field-based study and submit a report under the guidance of the faculty member.

PYTHON PROGRAMMING

| Pre-requisites for the Course | Bachelors in any discipline and analytical thinking with problem solving skills, C or C++ basics | |
|-------------------------------|---|--|
| Course Code | STS-595 | |
| Course Type | Compulsory | |
| Credit | 02 | |
| Contact Hours | 2 hours per week (including practical session) | |
| Course focussing on | Employability (Y), Entrepreneurship (Y), Skill Development (Y) | |
| Relevance of course to | Local, National, Regional and Global level | |
| Relation to | Data Analysis, Application Development and Research | |

Course Description: This is a M.A. level course which will introduce students to the fundamentals of python programming. Students will be able to learn problem solving approach using python programming in various domains.

Course Objectives: To teach the students,

- **1.** Python programming basics.
- 2. Writing programs using python programming language.
- 3. How to use various libraries to solve the problem using python.

On completion of the course Students will be able to learn:

- **1.** Design solutions to simple engineering problems by applying python programming language and basic mathematical knowledge.
- 2. To choose a suitable construct to develop code for a given problem.
- 3. To apply the python libraries to develop applications of different data types to solve real-world problems.

Course Structure - M.A. Defence and Strategic Studies Revised in Sept 2023 | Applicable for admission from A.Y. 2023-24 onwards

| Outcomes | Disciplin e | Multidisciplina ry Elective | Skill Developme |
|---------------|----------------------|--------------------------------|--------------------|
| | Specific Elective | | nt |
| Basic | | | |
| competency | Yes | Yes | Yes |
| Understanding | | | |
| capability | Yes | Yes | Yes |
| Knowled | | | |
| ge | Yes | Yes | Yes |
| applicati | | | |
| on | | | |
| LOTS to HOTS | | | |
| | Yes | Yes | Yes |
| Career choice | | | |
| | Yes | Yes | Yes |

| Unit No. | Торіс | Contact Hours |
|----------|---|------------------|
| UNIT-I | Introduction to Python: | 14 |
| | The basic elements of python, installing and working with python, Understanding Python variables, Python basic Operators, understanding python blocks, statements and comments, type conversion, declaring and using numeric data types, using string data type and string operations, list, tuple, set, dictionary, nested statements, indexing, slicing Flow Control and Functions: Using if statement, using else statement, elif clause, while loops, for loop, break and continue, pass statement, looping, Python functions, arguments, recursion, anonymous function, lambda function, global, local, non-local, keyword arguments, default parameters, modules, packages | |

Course Structure - M.A. Defence and Strategic Studies Revised in Sept 2023 | Applicable for admission from A.Y. 2023-24 onwards

| UNIT-II | Files and Exceptions: Reading from text files, writing to text files, storing complex data in files, pickling, unpickling, shelving, handling exceptions, multiple exceptions, else clause Object and Class Creating classes, methods, objects, using constructors, destructors, attributes, class attributes, static methods, object encapsulation, private attributes, private methods, controlling attribute access, inheritance, types of inheritance in python, understanding polymorphism, importing modules & classes, operator overloading, iterators, generators Standard Libraries: Operating system interface, file wildcards, command line arguments, string pattern matching, mathematics, internet access, date and time, data compression, performance measurement | 16 |
|---------|--|----|
| | | 30 |

References:

- 1. Introduction to Computation and Programming Using Python by John V Guttag, Prentice Hall of India
- 2. Core Python Programming by R. Nageswara Rao, dreamtech
- 3. Core Python Programming by Wesley J. Chun, Prentice Hall
- 4. Data Structures and Algorithms in Python by Michael T. Goodrich, Roberto Tamassia, Michael H. Goldwasser, Wiley
- 5. Fundamentals of Python First Programs by Kenneth A. Lambert, Cenagepublication
- 6. Luke Sneeringer, "Professional Python", Wrox
- 7. Online Resources and PPTs given by teacher

INTRODUCTION TO CHINESE LANGUAGE – 2

| Pre-requisites for the Course | None |
|-------------------------------|---|
| Course Code | STS-592 |
| Course Type | Minor Elective (Compulsory) |
| Credit | 02 |
| Contact Hours | 3 hours per week (including 1 hr consultation/tutorial) |
| | |
| Course focussing on | Employability, Entrepreneurship, Skill Development |
| Relevance of course to | National, Regional and Global level |
| Relation to | Professional Ethics |

Course Description: This is an introductory course in Chinese language. It familiarize students with elementary level of the language. Following the HSK Level 1 pattern, the course covers the basic reading and speaking of Chinese language. Thus in this course students will be introduced to basic structure of the language along with greetings and self-introduction.

Course Objective: By the end of this course, the students will:-

- Develop an ability to understand about basic 150 Chinese characters.
- Be able to express themselves in daily life circumstances.
- Be able to express themselves through proper pronunciation of 150 Chinese characters.

On completion of the course students will be able to :-

LO 1 – Express themselves in daily life circumstances.

LO 2 – Express themselves through proper pronunciation of 150 Chinese characters.

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks (Assignments/Term Paper :20Marks Mid- Semester exam : 30Marks)

End Semester Exam - 50 marks

Teaching Methods: Bulk of the teaching will take place through classroom lectures and interactions. For students, regular attendance and participation in the class are essential. Group and individual activities from student participants would supplement classroom engagement. Students are expected to participate actively in classrooms based on their critical understanding of assigned readings. 70% attendance is necessary for the end semester exam.

Course Content

UNIT -1: Listening Comprehension

• Introduction to listening and understanding basic Chinese characters

UNIT -2: Introduction to Reading Chinese Characters

- 150 most commonly used characters
- Basic Grammar patterns

<u>Readings</u>

- Alison Matthews and Laurence Matthews, Learning Chinese Characters HSK A, Tuttle, 2007.
- China Education Centre, HSK Online Practice Tests

INTRODUCTION TO FRENCH LANGUAGE - 2

| Pre-requisites for the Course | None |
|-------------------------------|---|
| Course Code | STS-593 |
| Course Type | Minor Elective (Compulsory) |
| Credit | 02 |
| Contact Hours | 3 hours per week (including 1 hr consultation/tutorial) |
| Course focussing on | Employability, Entrepreneurship, Skill Development |
| Relevance of course to | National, Regional and Global level |
| Relation to | Professional Ethics |

Course Description: This is an introductory course in French language. It familiarize students with elementary level of the language. Following the 'Common European Framework of Reference', the course covers A1.B level of French language. Thus in this course students will be introduced to basic skills to engage in conversation related to daily life tasks.

Course Objective: The course aims to enable students to develop an ability to put question for daily life tasks. To be able to express their daily life activities in present as well as *future proche*. To be able to express themselves in conversation related to daily situation.

On completion of the course students will be able to :-

LO 1 – Put question for daily life tasks.

LO 2 – Express their daily life activities in present as well as *future proche*.

LO 3 – Express themselves in conversation related to daily situation.

LO 4 – Express anything in negative sentences.

Note: LO: Learning Outcome

Evaluation Method:

Sessional Evaluation (Mid Semester Exam/ Term paper & presentations) - 50 marks (Assignments/Term Paper :20Marks Mid- Semester exam : 30Marks)

End Semester Exam - 50 marks

Teaching Methods: Bulk of the teaching will take place through classroom lectures and interactions. For students, regular attendance and participation in the class are essential. Group and individual activities from student participants would supplement classroom engagement. Students are expected to participate actively in classrooms based on their critical understanding of assigned readings. 70% attendance is necessary for the end semester exam.

Course Content

UNIT -1: La vie quotidienne

- Parler de ses acvtivités quotidiennes
- Parler des sports et des loisirs
- Exprimer au futur proche
- Prendre un rendez-vous

UNIT -2: Les Conversations circonstancielles

- Se situer dans le temps
- Demander l'heure er la date.
- La negation
- Le futur proche

Readings

- Francais.com, Clé Internationale, Paris, 2011
- A propos A1, Press Universitaire de Grenoble, Grenoble, 2010
- Regine Merieux & Yves Loiseau, Latitudes (A1/A2), Didier, Paris, 2008.