UNIVERSITY OF EDUCATION, WINNEBA

Four-Year
Bachelor of Education Degree

Eight Semester
Initial Teacher Education Curriculum

Upper Primary
(Primary Four to Six)

May 2018

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Part 1: Introduction to the B.Ed. Curriculum

The Vision for The Four-Year Bachelor Of Education Degree

To prepare new teachers to become effective, engaging and inspirational, and be fully prepared to teach the basic school curriculum in order to improve the learning outcomes and life chances of all learners as set out in the National Teachers' Standards (NTS). The aims are: to instil in the new teachers the Nation's core values of honesty, integrity, creativity and responsible citizenship and to achieve inclusive, equitable, high quality education for all learners in line with Sustainable Development Goal (SDG) Four (4).

Setting the Scene

This Four-Year Bachelor of Basic Education Degree (B.Ed.) is fully aligned with the expectations, principles and practices set out in the National Teacher Education Curriculum Framework (NTECF). Student teachers pursuing this degree will be fully prepared to meet the NTS and to be assessed against it. The intention of this B.Ed. curriculum is to transform initial teacher education (ITE) and through this secure the training of highly qualified, motivated new teachers who are able to inspire their learners to achieve better outcomes in basic education.

The B.Ed. curriculum has been written through a collaboration of four teacher education universities with senior colleagues from Colleges of Education, bringing together for the first time leading educational minds from across Ghana to create the curriculum.

Background to the reform of ITE

In the past 20 years, there have been numerous minor reforms in ITE in Ghana, which have had very little impact on children's learning outcomes. The goal of this reform is to transform ITE to prepare highly qualified, motivated new teachers who are able to inspire their learners to achieve improved outcomes in basic education and to improve the life chances of Ghana's children and young people.

The reform policy

In 2018 Cabinet approved The Policy for ITE Reform. This requires a fundamental rethinking and radical redesign of ITE in order to achieve the necessary dramatic improvements in the quality of new teachers. The B.Ed. Curriculum has been written in tandem with, and as part of, the wider reform of Education and the school curriculum.

The scope of the reform

- *National Teachers' Standards (NTS).* These set out, for the first, time the minimum values, skills, knowledge and attributes required of a good teacher. In future, student teachers will have to be assessed as meeting the NTS in order to secure their license. The NTS were developed by the National Teaching Council (NTC) through a wide consultation.
- *National Teacher Education Curriculum Framework (NTECF).* The framework provides the details necessary for the development of an ITE curriculum, which will enable student teachers to meet the NTS. It was developed through the leadership of National Council for Tertiary Education (NCTE) and involved wide stakeholder consultation and achieved national endorsement from all stakeholder groups. All future ITE curricular must be written to the principles, practices, model and content of the NTECF.
- *Conversion of Colleges of Education into University Colleges of Education affiliated to public universities offering education curricula.*
- *Design, for implementation in October 2018, of a new four-year Bachelor of Education curriculum for initial teacher education to be offered at the University Colleges of Education and based on the NTECF and assessed through the NTS.*

The B.Ed. Curriculum and the NTECF

The NTECF has determined all aspects of this B.Ed. Curriculum. It provided:

- the vision for the curriculum for preparing the teachers Ghana's children need,
- key learning outcomes for student teachers,
- the model of progression of student teachers' learning: beginning, developing, embedding, and extending teaching across the four years,
- the approaches to, and rationale for, teaching, learning and assessment of student teachers,
- the aims and guiding principles for the curriculum which are:
  - an unwavering focus on developing the essential skills, knowledge and understanding required for a good teacher as set out in the NTS,
  - ensuring student teachers are fully equipped to teach the Basic School Curriculum,
  - increased focus on literacy in Ghanaian languages and English,
  - extended periods of supported teaching in school,
  - introducing level-specific specialisms for KG-P3, P4-6, and JHS,
  - emphasizing an interactive, learner-focused approach to training,
  - explicitly addressing and developing cross-cutting issues: inclusion and equity, gender, SEN; ICT; core and transferable skills; professional values and attitudes; action research and reflection,
  - requiring high quality CPD for tutors, mentors, lecturers, school and college / university leaders and district directors of education leading to and during implementation,
  - requiring robust quality assurance and accountability during implementation.

Objectives of the Curriculum

The curriculum is designed to prepare teachers who:

- are equipped with professional skills, attitudes and values, secure content knowledge as well as the spirit of enquiry, innovation and creativity that will enable them to adapt to changing conditions, use inclusive teaching strategies, engage in life-long learning and demonstrate honesty, integrity and good citizenship in all they do,
- have a passion for teaching and learning, and are able to reflect on their practice, engage with members not only in the school community but also in the wider community, and act as potential agents of change,
- demonstrate attainment of the minimum levels of practice for a good teacher, as set out in the NTS in order to inspire and challenge learners to achieve their potential irrespective of gender, disabilities, cultural, social, linguistic or geographical factors,
- demonstrate the ability to integrate curriculum, subject and pedagogical knowledge, and plan for and use of differentiated, interactive instructional strategies and resources in their teaching,
- are able to teach and assess the subjects of their respective specialisms including specialist subject teaching at JHS,
- have an understanding of subject, pedagogy and progress in learning across specialism areas,
- can promote literacy in the English language and at least one Ghanaian language, especially at the Upper Primary level
- understand the learning outcomes of the subjects they teach and are able to use assessment to support learning, and to identify barriers to learning and misconceptions about learning,
- know how to use ICT; have technology and information literacy and are able to integrate technology into teaching,
- have a good understanding of national educational policies and priorities,
- have a good grasp of the content of the textbooks, teachers' guides, syllabi and other resources required by the curriculum,
- have a good understanding of their own professional identity, beliefs, emotions, strengths and weaknesses,
- promote critical thinking, problem solving, and communication through the learning environment they create,
- exhibit attitudes, values and beliefs that are in tune with the code of ethics of the teaching profession.

The curriculum is also intended to promote close partnerships between University Departments of Education with their affiliated Colleges of Education and local schools and District Directorates of Education; and close working relationships with strategic local and regional partners.

Structure of the B.Ed. Curriculum

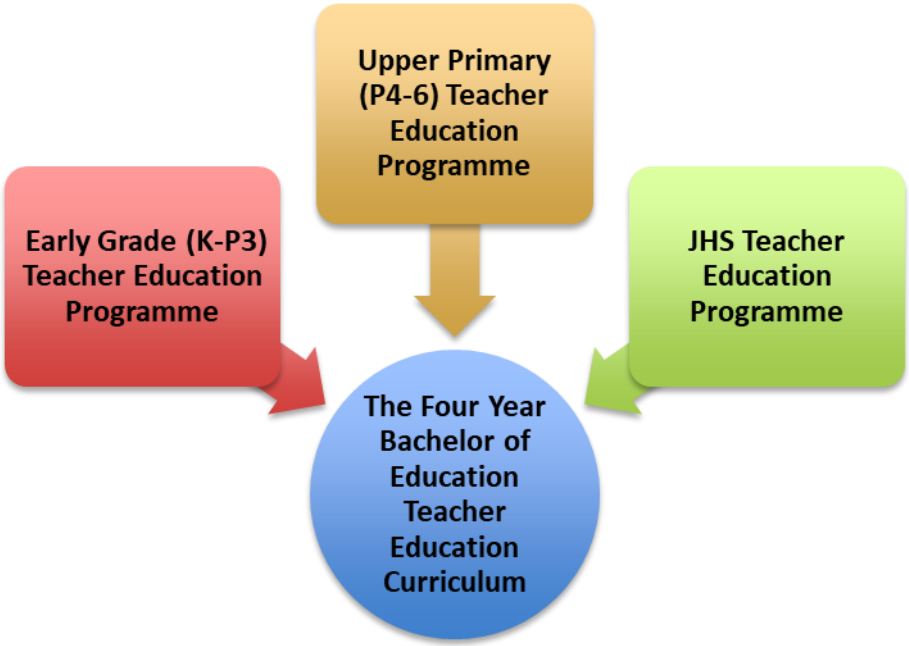

Figure 1: The B.Ed. Curriculum

This four-year, eight semester curriculum, is made up of three distinct programmes: Early Grade Education (Kindergarten to Primary Three), Upper Primary Education (Primary Four to Six) and Junior High School Education, (Figure 1). Each of the programmes is written to adhere to the ITE curriculum structure set out in the NTECF, (Figure 2).

The NTECF consists of the four pillars of teacher education. These represent the knowledge, skills and understanding necessary for effective teaching: Subject and Curriculum Knowledge; Literacy Studies: Ghanaian Languages and English; Pedagogic Knowledge and Supported Teaching in School.

Figure 2: The Structure of the Curriculum, the NTECF

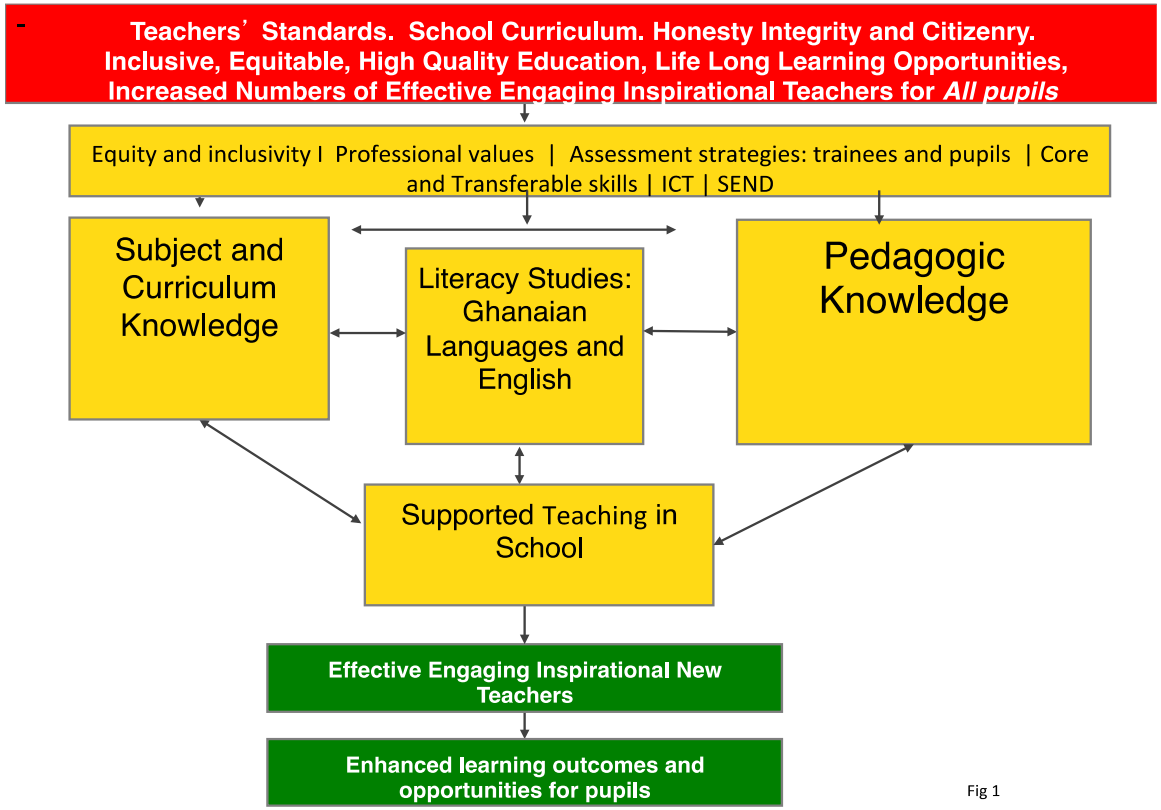

Fig 1

The two remaining parts of the NTECF, the red and yellow bars in Figure 2, represent the values, attitudes and issues, which both underpin and cut across the four pillars.

Figure 3: The Expanded Model of the Four Pillars of the Curriculum

Figure 3 is an expanded model of the curriculum and shows the aspects of the curriculum to be covered through each pillar.

The Foundations of the B.Ed. Curriculum

There are a number of distinctive features which inform the B.Ed., and provide the foundations of the curriculum.

A value-driven curriculum: the writing of the NTECF and of this curriculum was driven by the nation's core values of honesty, integrity, creativity and responsible citizenship, and with the intent of achieving SDG4: inclusive, equitable quality education and lifelong learning for all, and by the vision for a good teacher as set out in the NTS.

A concurrent curriculum: Student teachers' subject content knowledge, pedagogy and assessment approaches and practical teaching skills are developed alongside each other.

***An integrated curriculum*:** preparing student teachers to: meet the requirements of the NTECF; be assessed against the NTS and to be able to teach the Basic School Curriculum. Cross-cutting issues connect the different areas of study, cutting across subject-matter lines and emphasizing unifying concepts. The integration focuses attention on making connections for student teachers, allowing them to engage in relevant, meaningful activities directed at developing the skills, knowledge and understanding of an effective teacher.

***A developmental curriculum*:** student teachers will progress through four levels: beginning, developing, embedding and extending teaching. Each level has its own set of expectations. Student teachers' progress, learning and skills through each subject or learning area will be mapped out across the four years.

***Interactive pedagogy*:** student teachers will be prepared to base the pedagogy they use on the social constructivist view, which sees teacher education as the co-construction of knowledge. They will be able to use differentiated instruction and assessment strategies.

The four pillars of the curriculum: these set out the essential knowledge, skills and understanding necessary for effective teaching, as defined by the NTECF (Figure 2).

- **Subject and curriculum knowledge***:* secure, subject-specific content and pedagogic knowledge are the key to being able to teach the school curriculum including: subject knowledge for teaching; progress in learning in subjects; misconceptions, potential contextual barriers to learning and curriculum studies. All school curriculum subjects are addressed and made specific to each specialism.
- **Literacy Studies (Ghanaian Languages and English),** including Upper Primary Literacy in L1 and L2. As language is the key to enabling children to access the curriculum, this learning area is a pillar in its own right.

- **Pedagogic Knowledge**, including: general pedagogic knowledge, assessment strategies, introduction to and development of cross cutting issues, education studies, preparation for supported teaching in school, classroom enquiry and research, Inclusion and equity, SEN and ICT.
- **Supported teaching in school**: student teachers will spend 30% of their training in the field. For the KG-P3 and P4-6 specialisms this training period will be spent in schools with the support of mentors. For TVET this part of the training will be divided between TVET schools and industry with the support of mentors. The mentors will assess student teachers on the development of competencies and skills set out in the National Teachers' Standards.

***Specialism options*:** following a foundation first year, student teachers will elect to follow one of three programmes: Early Years' (K-P3); Upper Primary (P4-6) or Junior High School. This will ensure depth of knowledge of what is to be taught and enable them to connect with the developmental level of the learners they teach.

Model of Progress in Student Teacher Learning Across the Four Years

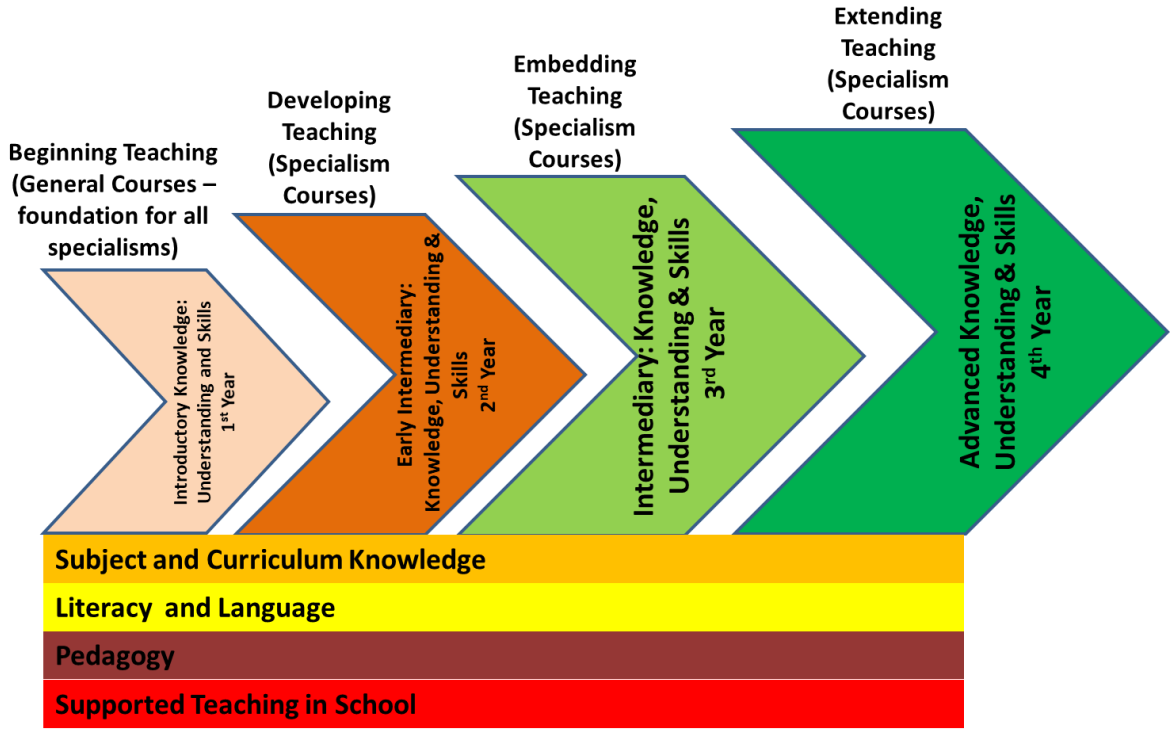

Figure 4: Model of Progress of Student Teachers Across the Four Years.

Figure 4, above, shows the model of progress for student teachers across the four years. Each year of the curriculum builds on the outcomes of the previous year. This is achieved through: college-based training, school-based experience and training, course work, practical work, work-based learning and independent study.

- Year one: beginning teaching, provides support for the transition from school to college and recognises that many student teachers will have come from school level education and from a wide range of backgrounds and experience. It introduces the key principles and practises of the subjects and learning areas and supported teaching in school within the wider curriculum thereby ensuring that student teachers can locate their specialisms.

- Year two: developing teaching, student teachers elect for one of the three specialism programmes but key features from year one continue to be developed as relevant to each specialism. The second year prepares student teachers to identify and assess weaknesses and barriers to learning for learners and carry out small-scale action research under the guidance of mentors.
- In embedding teaching, year three, student teachers will continue to build skills, knowledge and understanding in their chosen specialism. They will co-plan and co-teach groups of learners and whole classes; carry out small scale classroom enquiries and provide evidence of working towards meeting the NTS. Year three includes preparation for year four, semester one: final supported teaching in school (internship) and for significant classroom-based enquiry and action research projects.
- Year four semester two, students will return to school to complete some courses. By the end of the fourth year, extending teaching, student teachers will: plan, teach and assess their learners independently and with increasing consistency; exhibit the ethical codes of conduct, values and attitudes expected of a teacher; carry out extensive action research projects and provide evidence of meeting the National Teachers' Standards in full.

Inclusion and Equity, Student Progress Through the B.Ed. Curriculum

Year one: awareness of self and learners as unique individuals

- Transition from SHS student to student-teacher; start portfolio with child study; traits of the profession
- Develop awareness of self, as individual and future teacher
- Develop awareness of how teachers' bias and beliefs can impact on learning (e.g. *boys are engineers, girls are mothers; "slow learners" cannot learn; poor children cannot be successful adults*)
- Identify own beliefs and bias about diversity, inclusion and equity
- Begin to identify the characteristics that make each learner (in child study) unique
- Definition of inclusion (this can be revised every semester through the courses as part of developing the student teacher's personal philosophy)
- Begin to identify diversity characteristics as expressed in the subjects

Year two: teachers' values and attitudes impacting on pupils' learning, how diversity impacts on learning

- Begin to identify, assess and analyze the needs of children, taking into account any issues of background and experience. Emerging ability to reflect on and develop their understanding of teaching, learning and assessment;
- Begin to identify the characteristics of an inclusive teacher (values & attitudes);
- Identify school and student characteristics that act as barriers to learning;
- Develop understanding of how diversity can impact learning and what they can do about it;
- Understand that learner diversity is to be respected, valued and understood as a resource that enhances learning opportunities and adds value to schools, local communities and society;

- Know that ALL learners' voices should be heard and valued;
- Recognize how the teacher is a key influence on a learner's self-esteem and, as a consequence, their learning potential;
- Understand that learners learn in different ways and that this can be used to support their own learning and that of their peers.
- KG- P3:
    - human development (**early years**) and developmental milestones;
    - development of gender role awareness (e.g., *boys & trucks, girls & dolls*);
    - transition from thematic approach to subjects
- P4 – P6
    - human development (**middle childhood**) and developmental milestones; transition to class teacher model and subsequently to subject-teacher in JHS;
    - establishment of personal bias and stigma;
    - opportunities to explore diversity in daily life, reflect on personal bias and analyse how institutional discriminations impact childhood;
    - opportunities to explore diversity within the class/subject and potential barriers to inclusion (including personal bias, stereotypes and institutional discrimination);
- JHS
    - human development (**early adolescence**) and developmental milestones;
    - making gender roles visible in the curriculum (e.g., over-representation of boys in maths).

Year three: being a team member, co-teaching and co-planning, planning for individualised instruction

- Co-planning, co-teaching and co-assessment; Plan for and teach sequences of lessons with regard to issues of equity and inclusivity. Evaluate and reflect on teaching and on pupils' learning to support students;
- Identify learners who struggle to overcome barriers;
- In collaboration with other professionals, write individualized plans of action, including differentiated instruction/assessment;
- Student teachers will understand that:
    - academic, practical, social and emotional learning are equally important for all learners;
    - effective teachers are teachers of all learners; teachers take responsibility for facilitating the learning of all learners in a class;
    - teachers' expectations are a key determinant of learner success and therefore high expectations for all learners are critical;
    - learners' abilities are not fixed; all learners have the capacity to learn and develop;
    - ALL learners should be active decision-makers in their learning and any assessment processes they are involved in;
    - the learning process is essentially the same for all learners – there are very few 'special techniques'; be familiar with different models of learning and approaches to learning; typical and atypical child development patterns and pathways, particularly in relation to social and communication skill development;

- support the development of learners' communication skills and possibilities as well as 'learning to learn skills – develop independent and autonomous learners;
- on some occasions, particular learning difficulties require responses based upon adaptations to the curriculum and teaching approaches; be familiar with assessment for learning and methods focused upon identifying the strengths of a learner.

Year four: teaching all learners; learners, school and community

- Consistently and independently plan for and teach, motivate and extend the learning of all children; to improve the learning opportunities of an agreed group of learners to promote greater inclusion;
- Identify/screen learners within a class, who might need: group, targeted, intensive interventions and plan accordingly (identify human resource support);
- Work with families and external professionals to ensure barriers to learning are identified, addressed and overcome;
- Understand that inclusive teaching is based on a collaborative working approach and requires all teachers to work in teams;
- Be aware of the added value of working collaboratively with parents and families;
- Be aware of the impact of inter-personal relationships on the achievement of learning goals;
- Be familiar with different levels of need/intervention aimed at preventing student failure;
- Be familiar with professionals who can support a learner overcome barriers;
- Collaboration, partnerships and teamwork are essential approaches for all teachers and should be welcomed;
- Be familiar with the language/terminology and basic working concepts and perspectives of other professionals involved in education;
- Be familiar with the power relationships that exist between different stakeholders that have to be acknowledged and effectively dealt with.

Specialism Programmes

Rationale for Specialism Programmes

- In order to achieve the overarching vision for the NTECF and to enable all student teachers to meet the NTS, the B.Ed. is made up of three specialism programmes: Early grade education (Kindergarten to Primary Three), Upper primary education (Primary Four to Six) and JHS education.
- The main argument for specialism programmes is that they are a key to achieving the depth and breadth of knowledge and skills required to enable teachers to significantly improve the learning outcomes of children and young people. This has not been achieved through generalist training.
- The Early Grade Education Programme, KG1 to P3, will use a thematic approach to training and equipping student teachers with developmentally appropriate practices, which promote play-based learning.

- The Upper Primary Education Programme, P4 to P6, will equip student teachers with the needed skills to be class teachers, able to teach all the subjects of the Basic School Curriculum and to support learning and development of the middle childhood learners.
- The Junior High School Education Programme will equip student teachers with specialist subject knowledge and the ability to address the developmental needs of learners in early adolescence.
- It is intended that student teachers will achieve the distinct knowledge and practice associated with specialisms as well as an overarching understanding across specialisms. Through this, student teachers will understand expectations for learning and pedagogies before and beyond their specialisms.
- Specialisms are seen as a vehicle for building quality and capacity in the education system (Education Sector Analysis on System Capacity, 2018).
- The specialisms are built on an existing and successful precedence. The Ministry of Education has supported the creation of specialism routes; eight CoEs are focusing on training Early Childhood teachers and an additional 15 have been designated to train science and mathematics for JHS. Alongside this, universities with teacher education faculties offer Early childhood, primary, JHS and SHS programmes.

How specialisms are developed in the B.Ed. Curriculum

- The specialisms are presented as discreet B.Ed. programmes with their own goals, learning outcomes and courses. However, as per the NTECF guidance, there is significant common ground to ensure that student teachers have both depth and breadth of knowledge to teach their specialism areas. Additionally, they are expected to attain a wider understanding of subject knowledge, teaching and progress in learning during, before and beyond their specialism. This will enable student teachers to support '*..smooth transition from upper primary to JHS. Students teaching in KG1-P3 will utilise pedagogies that will ensure smooth transition from this level to upper primary'* (NTECF p50). This can be achieved in a number of ways.
- The first year is a foundation year for all student teachers. It introduces: the nature and core knowledge of subjects, and locates the cross - cutting issues such as inclusion and equity in education; the school curriculum and approaches to teaching and learning, and the expectations for the learning and progress of learners in different subjects. It means student teachers will be able to locate their specialism within the wider curriculum.
- The specialism is introduced in year two and continues through to the end of year four. All subjects and learning areas share core content across programmes and there is an opportunity for student teachers to work in opposing specialisms during year four supported teaching in schools. Thus, these will help them achieve depth and breadth of knowledge in and across specialisms.
- *Full detail of the features of the specialisms can be found in Appendix i (Introduction to the Specialism Programmes).*

Credit Weightings of the Curriculum

In developing the curriculum, care has been taken to avoid student teacher overload. The content has been written with the learner, the student teacher, in mind, and specifically what is realistic in terms of the time available and what is achievable at each stage of training in order to enable them to meet the NTS in full.

The credit weightings in the Curriculum are closely aligned to the proportion of time allocated to each pillar and for each specialism in the NTECF. They follow the NAB guidance relating to the number of credits per year and the rubric relating to courses being allocated credits in multiples of three.

Students in a university pursuing 4-year Bachelor programmes must have a minimum credit of 120 and a maximum of 140. However, for professional programmes, the maximum is 168 credits. The total of 165 credits at JHS means that universities have the option to add 3 more credits. Course writers have been mindful of the time this suggests for working with student teachers and have worked to avoid overburdening the student teachers.

The total number of credits for a semester is either 21 or 24, other than in year four. Each three-credit course is equivalent to three hours face – to-face teaching or six hours practical or a combination of the two per week. The ultimate interpretation of credit hours is at each institution's discretion but it is essential to avoid overloading student teachers by over extending the hours allocated.

Year four, semester one is the supported teaching in school internship. Project work (action research and classroom enquiry) will start in year four semester one and be completed in semester two. The three credits for project work are located in semester one. Student teachers will present evidence of meeting the NTS in the Post STS internship seminar in semester 2 based on their professional portfolio. The seminar attracts 3 credits. The STS internship which includes three credits for the professional portfolio is worth 15 credits.

The 7.27% variance in pedagogy (in terms of NTECF) is taken care of by subject specific PCK, in the Subject and Curriculum Knowledge pillar.

The content and structure of each specialism reflect the structure, subjects and teaching of the school curriculum. So, for example, the JHS student teacher will select two specialist subjects as electives and also study pedagogic studies, and the core subjects.

The following tables show the weightings attributed to each subject and learning area across the four years and for each specialism

Table 1 Early Grade Programme Specialism

KG-P3		Y1S1	Y1S2	Y2S1	Y2S2	Y3S1	Y3S2	Y4S1	Y4S2	Total	%	Area	Proposal	NTECF	Variance
Subject/learning area		**Credit**	**Credit**	**Credit**	**Credit**	**Credit**	**Credit**	**Credit**	**Credit**	**Credit**					
Pedagogic Knowledge with ICT & Inclusion: SEN/Gender * **		**6**	**6**	**6**	**6**	**6**	**6**		**6**	42	25.45%	**Pedagogy**	25%	25%	**0%**
Literacy and Languages, Eng., Ghanaian Language, *		**3**	**3**	**6**	**3**	**6**	**6**		**3**	30	18.18%	**literacy**	18%	20%	**-2%**
Mathematics /Numeracy		**3**	**3**	**3**	**3**	**3**				15	9.09%	**Subject knowledge (Including Curriculum Studies and PCK)**	27%	25%	**-2%**
Science		**3**	**3**	**3**	**3**	**3**				15	9.09%				
Social Studies /TVET/ Music & Dance/PE *		**3**	**3**	**3**	**3**	**3**				15	9.09%				
Supported teaching in School	**3**		**3**	**3**	**6**	**3**	**9**	**18**	**3**	48	29.09%	**Supported teaching**	29%	30%	**1%**
TOTAL	**21**		**21**	**24**	**24**	**24**	**21**	**18**	**12**	**165**	**100.00 %**		**100%**	**100%**	**0%**
All subjects or integrated subjects courses are compulsory															
In the early grade curriculum, there is total integration of pedagogy and curriculum and subject knowledge resulting in minimum variance from NTECF requirement.															
***These will be taught as integrated learning areas, using a thematic approach**															

Table 2 Primary 4 – 6 Specialism

P4-6	Y1S1	Y1S2	Y2S1	Y2S2	Y3S1	Y3S2	Y4S1	Y4S2	Total	Percentages	Area	Proposed	NTECF	Variance
Subject / learning area	**Credits**	**Credits**	**Credits**	**Credits**	**Credits**	**Credits**	**Credits**	**Credits**	**Total**					
Pedagogic Knowledge with ICT & Inclusion: SEN/Gender	**6**	**6**	**6**	**6**	**3**	**3**		**3**	**33**	20.00%	**pedagogy**	20.00%	25.00%	5.00%
Literacy, English and Ghanaian languages*	**3**	**3**	**6**	**3**	**6**	**3**		**6**	**30**	18.18%	**literacy**	18.18%	20.00%	1.82%
Mathematics	**3**	**3**	**3**	**3**	**3**	**3**			**18**	10.91%	**Subject knowledge (Including Curriculum Knowledge & PCK)**	32.73%	25.00%	-7.73%
Science	**3**	**3**	**3**	**3**	**3**	**3**			**18**	10.91%				
Social Studies/TVET/Music & Dance/PE*	**3**	**3**	**3**	**3**	**3**	**3**			**18**	10.91%				
Supported Teaching in School	**3**	**3**	**3**	**6**	**3**	**9**	**18**	**3**	**48**	29.09%	**STS**	29.09%	30.00%	0.91%
Total	21	21	24	24	21	24	18	12	**165**	100.00%		100.00%	100.00%	0.00%
***Guidance on how multiple subject courses should be taught is on pages 45 – 51: The introductions to the specialisms in the Curriculum Writing Guide**														
All subjects or integrated subjects courses are compulsory														

Table 3 JHS 1-3 Specialism

JHS ELECTIVE SPECIALIST NON-CORE (E.G. TVET & ICT)	Y1S1	Y1S2	Y2S1	Y2S2	Y3S1	Y3S2	Y4S1	Y4S2	Total	Percentages	Area	Proposed	NTECF	Variance
Subject/ learning area	**Credit***	**Credit**	**Credit**	**Credit**	**Credit**	**Credit**	**Credit**	**Credit**	**Credit**					
Specialist Subject 1*			**6**	**6**	**6**	**3**		**6**	27	16.36%	**Subject knowledge (Including Curriculum Knowledge and PCK)**	47.27%	40.00%	**-7.27%**
Specialist Subject 2*			**6**	**6**	**6**	**3**		**6**	27	16.36%				
Mathematics Core	**3**	**3**							6	3.64%				
Science Core	**3**	**3**							6	3.64%				
Social Studies Core	**3**	**3**							6	3.64%				
TVET/Music & Dance/PE **	**3**	**3**							6	3.64%				
Literacy and Languages, Eng., GL, (French) **	**3**	**3**	**3**	**3**	**3**	**3**			18	10.91%	**Literacy**	10.91%	10.00%	**-0.91%**
Pedagogic Knowledge with ICT & Inclusion: SEN/Gender **	**3**	**3**	**3**	**3**	**3**	**3**		**3**	21	12.73%	**Pedagogy**	12.73%	20.00%	**7.27%**
Supported Teaching in School (STS)	**3**	**3**	**3**	**6**	**3**	**9**	**18**	**3**	48	29.09%	**STS**	29.09%	**30.00%**	**0.91%**
Total	**21**	**21**	**21**	**24**	**21**	**21**	**18**	**18**	**165**	**100.00%**		**100.00%**	**100.00%**	**0.00%**
The specialist subject areas are: English, French, Ghanaian Language, ICT, Maths, Music, PE, Science, SEN, TVET (Technical Skills, Vocational I & II), History, Geography, RME and Social Studies. Depending on areas of specialisation, there should be introductory course across 1st Year with zero credit														
****Guidance on how multiple subject courses should be taught is on pages 45 – 51: The introductions to the specialisms in the Curriculum Writing Guide**														

The Assessment Of Student Teachers

Overview.

- Student teachers must be assessed against the NTS in a way that has a positive impact on their progress towards being good teachers. This is particularly relevant for supported teaching in school components.
- Student teachers must be realistically and fairly assessed against the Standards in accordance with what can be reasonably expected of teachers still learning to teach.
- Student teachers' creative and innovative skills must be assessed as appropriate to the CONTEXT and circumstances they are in and for the level of learners they are to teach, for example, for very young children in pre-school, or for young people needing specialist knowledge at Junior High School**.**
- Those assessing student teachers and student teachers themselves must know the Standards, use them as an exemplification of what a 'good teacher' looks like in Ghana, and as the key reference point in their assessment. Content and learning outcomes must support progress to meeting the Teachers' Standards.
- Feedback from assessments must provide information to student teachers on how they can improve and identify targets for improvement.
- Assessment should: include the use of a range of appropriate measures; take place throughout the course; have clearly specified progression stages and include assessment of, for and as learning.
- There needs to be consistency in assessments across the curriculum and at each level. This should support:
  - tracking the growth of competence for individual student teachers against the NTS,
  - tracking group performance year after year and evaluating impact of improvements,
  - building programme coherence around a common assessment language,
  - providing NAB with information about curriculum quality.
- *All assessments must be underpinned by an awareness of inclusion and equity of opportunity, both in relation to student teachers' own learning experience and to the experience of their learners*.
- **Suggested % weightings for assessments across the three programmes are**
  - **30% Supported Teaching in School**
  - **40% Course work, including: assignments, presentations, projects.**
  - **30% Examination, including quizzes**
- Assessment components should be limited to **three** per three-credit course regardless of the number of subjects or learning areas involved, to avoid assessment overload.
- Any single course assessment component may encompass assessment for, of and as learning.

- All assessment components must have related aspects of NTS identified.
- Assessment components should exemplify how student teachers' ability to address inclusion and equity is being developed.
- Assessment components should exemplify how core and transferable skills, Global competencies, from the proposed new BSC are being developed and addressed.

Assessment strategies. All assessments must be structured to provide evidence of a student teacher's progress against the Standards and contribute to their development as a teacher, reflecting the strategies they could use when assessing learners. Essential to this is the production of a professional teaching portfolio. The portfolio can be organised according to the three domains of the Teachers' Standards; specific evidence is likely to cross more than one of the interlinked domains.

- Evidence from college-based learning will be in the form of assignments, feedback on group and individual presentations, recordings of performances, examination results and lecture notes**.**
- Evidence from in-school learning will be from lesson plans, study notes, resources, assessment records, learner exercise books, photographs, action research and case study, evaluations from tutors and mentors, testimonials, minutes of meetings and any notes from CPD courses, and evidence collected by the student teacher over time.
- For critical reflective practice, the professional portfolio provides the starting point for the continued development of the teacher through their Induction year and for subsequent years.

Additional expectations. By the end of their training student teachers, through attaining the NTS, will demonstrate the academic attributes associated with a graduate of a professional teaching degree.

Approaches to Teaching Student Teachers

The interactive teaching strategies emphasised throughout the curriculum have been chosen to align with the guidance for the NTS and in the NTECF.

Lecturers and tutors will need to support student teachers to reflect on their various school experiences and to make sense of what they have learnt. Universities/Colleges with schools on campus provide ideal opportunities for lecturers/tutors to observe classes with their student teachers, to model exemplary teaching themselves and to work alongside teachers in guiding and assessing student teachers.

Mentors and supervisors will need to work with their student teachers carrying out joint planning sessions with them and allowing student teachers to work with a child or group of children, accompany their mentor to staff and parent-teacher meetings, team-teach and then in the final practicum take on the responsibility of several classes. Mentors will also have to undertake regular meetings with their student teachers to discuss progress against meeting the NTS, acting where there are gaps in what the student teachers know can do or have not yet had an opportunity to experience. (NTS P16 and 17)

Teaching strategies identified are appropriate to addressing the needs of student teachers, the nature of the subject or learning area and the location of the training. They are designed to support student teachers in achieving the learning outcomes of each course.

Through their approach to teaching, tutors, lecturers and mentors will need to model key teaching strategies for student teachers. These include: problem-solving, decision-making, questioning, action planning and target setting, critical and reflective thinking, planning for teaching, collaborative and interactive group work.

Admission Requirements

The entry requirements for admission to the new 4-Year B.Ed. degree is as follows:

i. WASSCE Holders: **CREDIT** (A1-C6) in Six (6) subjects comprising Three (3) Core subjects, including English Language and Core Mathematics, and Three (3) Elective subjects relevant to the course of study.
ii. SSSCE Holders: **CREDIT** (A-D) in Six (6) subjects comprising Three (3) Core subjects, including English Language and Core Mathematics, and Three (3) Elective subjects relevant to the course of study.
iii. Holders of TVET Qualifications: CREDIT in Three Core subjects including English Language and Mathematics and PASSES in Three Elective subjects relevant to the course of study.

Candidate **awaiting** the MAY/JUNE 2018 WASSCE and NAPTEX RESULTS can also apply.

Exit Requirements

Students are expected to accumulate a minimum of 165 credits.

The student teacher must

- fully meet the National Teachers' Standards (NTS)
- achieve a minimum CGPA of 1.5 in all courses
- successful completion of 168 days school experience (supported teaching in schools)

The B.Ed. Upper Primary Specialisms Programme Course Structure

YEAR ONE SEMESTER 1 (1ST SEMESTER)				
COURSE CODE	**COURSE TITLE**	**T**	**P**	**C**
	Foundations of Education in Ghana	2	2	3
	Inclusive School-Based Inquiry	2	2	3
	Introduction to Language and Literacy	2	2	3
	Introduction to Learning and Applying Number and Algebra	2	2	3
	Introduction to Integrated Science I[1]	2	2	3
	Foundations of Social Studies and Technical Vocational Education and Training (TVET)	2	2	3
	STS: Beginning Teaching I	0	6	3
	SUB-TOTAL	**12**	**18**	**21**
YEAR ONE SEMESTER 2 (3RD SEMESTER)				
COURSE CODE	**COURSE TITLE**	**T**	**P**	**C**
	Social. Cultural and Psychological Basis of Learning	2	2	3
	Introduction to Information and Communication Technology[2]	2	2	3
	Communication Skills[3]	2	2	3

[1] This is a University Required Course
[2] This is a University Required Course

	Learning, Teaching and Applying Geometry and Handling Data	2	2	3
	Introduction to Integrated Science II	2	2	3
	Physical Activity, Sports, Music and Dance[4]	2	2	3
	STS: Beginning Teaching II	0	6	3
	SUB-TOTAL	**12**	**18**	**21**
	CUMULATIVE TOTAL	**24**	**36**	**42**
YEAR TWO SEMESTER ONE (3RD SEMESTER)				
Course Code	Course Title	T	P	C
	Differentiated Planning and Learning for Upper Primary	2	2	3
	Multimedia Development and Use for Upper Primary	2	2	3
	STS: Developing Teaching I	0	6	3
	Theories of Learning Mathematics for Upper Primary	2	2	3
	Integrated Science I for Upper Primary	2	2	3
	Ghanaian Identity, Culture and Art	2	2	3
	Introduction to English Language	2	2	3
	Principles and Rules of Writing a Ghanaian Language			
	Literacy (Teaching Speaking and Listening)	2	2	3
Sub-total		14	10	24
Cumulative Total				66
YEAR TWO SEMESTER TWO (4TH SEMESTER)				
Course Code	Course Title	T	P	C
	Differentiated Assessment for Upper Primary	2	2	3
	Psychology of Learning in Middle Childhood	2	2	3
	STS: Developing Teaching II	0	12	6
	Teaching and Assessing Mathematics for Upper Primary (Introductory)	2	2	3

[3] This is a University Required Course
[4] This is a University Required Course

	Integrated Science II for Upper Primary	2	2	3
	Introduction to Literature in English	2	2	3
	Structure of a Ghanaian Language			
	Analysis of Policy Documents and Syllabi in Music/PE	2	2	3
Sub-total				24
Cumulative Total				90
YEAR THREE SEMESTER ONE (5TH SEMESTER)				
Course Code	Course Title	T	P	C
	Guidance and Counselling for Upper Primary	2	2	3
	STS: Embedding Teaching I	0	6	3
	Teaching and Assessing Mathematics for Upper Primary (Intermediate)	2	2	3
	Integrated Science III for Upper Primary	2	2	3
	English Language Curriculum for Upper Primary	2	2	3
	Literacy (Children's Literature)	2	2	3
	Literacy (Teaching Reading and Writing for Upper Primary)[5]	2	2	3
	Sport, PE, Music and Dance in Local and Global Cultures	2	2	3
Sub-total				24
Cumulative Total				114
YEAR THREE SEMESTER TWO (6th SEMESTER)				
Course Code	Course Title	T	P	C
	Inquiry and Action Research for Upper Primary	2	2	3
	STS: Embedding Teaching II	0	18	9
	Teaching and Assessing Mathematics for Upper Primary (Advanced)	2	2	3
	Preparing to Teach Upper Primary Science	2	2	3
	English Classroom Organisation Management and Assessment)	2	2	3
	Oral Literature of a Ghanaian Language			
	Literacy Across the Curriculum	2	2	3

[5] This is a University Required Course

	Cultural Landscape and Food Production in Ghana	2	2	3
Sub-total				24
Cumulative Total				138
YEAR FOUR SEMESTER ONE-INTERNSHIP (7TH SEMESTER)				
Course Code	Course Title	T	P	C
	STS: Extending Teaching I (Internship)	0	24	12
	Portfolio Development	0	6	3
	Action Research Project	0	6	3
Sub-total				18
Cumulative Total				156
YEAR FOUR SEMESTER TWO (8TH SEMESTER)				
Course Code	Course Title	T	P	C
	School Administration and Management	2	2	3
	STS: Extending Teaching II (Post-Internship Seminar)	2	2	3
	Translation Practice	2	2	3
	Written Literature of a Ghanaian Language	2	2	3
Sub-total				12
Cumulative Total				168

Year One Semester 1

Pedagogic Knowledge with ICT & Inclusion: SEN/Gender

CONTEXT

In Ghana, learners in our classrooms have social, cultural, religious and economically diverse backgrounds with different entry behaviours that require instructional differentiation. However, instructional practices of most teachers ignore these diversities. Some teachers tend to use the same instructional strategies for all learners without recourse to diverse learning styles. Assessment of learners seems not to be differentiated to meet their varying learning needs. Some teachers are deficient in the use of appropriate strategies for managing small and large class sizes found in different school settings across the country.

Also, some of our cultural beliefs and practices are less tolerant of disability, leading to discrimination, isolation and negative attitudes towards children with disabilities. There are also misconceptions about disability, for example, disability is contagious, infectious and those who have disabilities cannot learn or may slow down learning of others without disabilities. There are other socio-cultural issues like ethnicity, gender, religion etc. that can lead to stereotypes, biases and exclusion. These issues and misconceptions can negatively affect teachers' attitudes.

Teachers must have the competencies to adapt the learning environment to make it conducive and more accessible to promote learning among those with special educational needs and disabilities. They must have competencies in behaviour modification strategies other than the use of corporal punishment.

Teachers must have the knowledge and skills for developing and using low cost instructional resources available in their communities to facilitate learning. Teachers must also possess the skills in enquiry and reflective practices to improve learning. They must have curriculum leadership and holistic understanding for implementing the curriculum.

Teachers must be adequately equipped with strategies for teaching multi-grade classes. There are some misconceptions about teaching which have negatively affected the passion and interest for teaching resulting in low commitment and loyalty to teaching. Some teachers are usually engaged in conducts that go contrary to the values and ethics of the profession.

Basic schools are community owned. There is therefore the opportunity for collaboration and relationship between schools and communities. The pedagogy courses therefore seek to equip student teachers with innovative and creative strategies that ease and make teaching and learning enjoyable and are supportive of the developmental and learning needs of diverse learners.

CONTEXT

There are some misconceptions about teaching which have negatively affected the passion and interest for teaching resulting in low commitment and loyalty to the teaching profession in Ghana. Some of our cultural beliefs and practices are also less tolerant of disability and education of females leading to discrimination, isolation and negative attitudes and biases towards female education and learners with special education needs (SEN). These have created barriers to learning and education of people with diverse needs and backgrounds thereby limiting equity and inclusion. The foundations of education course is designed to equip teachers with the knowledge and skills for addressing their misconceptions, biases and removing barriers to learning in all inclusive and multigrade schools. Teachers also need to be able to address their misconceptions about the use of and integrating ICT in teaching in learning in Ghanaian basic schools.

Course Title	**Foundations of Education in Ghana**						
Course Code	**PDE 111**	**Course Level: 100**		**Credit value: 3**		**Semester 1**	
Pre-requisite							
Course Delivery Modes	**Face-to-face: [√]**	**Practical activity: [ ]**	**Work-Based Learning:[ ]**	**Seminars: [√]**	**Independent Study: [√]**	**e-learning opportunities: [ ]**	**Practicum: [ ]**
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	The course intends to address conceptions, misconceptions and prejudices society has about teaching, myths surrounding the use of ICT and barriers to the education of learners with diverse needs and orientation. Additionally, the course seeks to provide student teachers with sound knowledge and understanding of relevant philosophical and sociological trends that influence teaching and education in Ghana (NTECF, p.68). Additionally, student teachers will examine the nature and structure of the basic education curriculum in Ghana and the assessment benchmarks. Differentiated interactive techniques (discussions, debates, diamond nine) and assessment procedures (case studies, presentation, report writing, projects) will be employed in the learning process The course will thus expose student teachers to various learning experiences to enable them develop and demonstrate skills with passion and honesty. They will also develop critical thinking and commitment to teaching in inclusive classrooms, and aspire for continuous professional development and lifelong learning (NTECF p. 68, NTS 1b, 1g, p.162d, 3e, 3k, 3p, 3l, p.18).						

Course Learning Outcomes	On successful completion of the course, student teachers will be able to	Indicators
	CLO 1. Demonstrate a clear understanding of procedures for addressing the misconceptions, prejudices and barriers to teaching, learning and Special Education Needs (SEN) (NTECF p.4, 13, 18, NTS 3f).	• Mention some of the misconceptions and prejudices about teaching and explain how to address them. • Identify some misconceptions and barriers to teaching and learning of girls and learners with SEN • Discuss various ways of addressing their misconceptions and barriers to teaching and learning in inclusive and multigrade settings.
	CLO 2. Demonstrate knowledge and understanding of the National Teachers' Standards (NTS), the structure of the basic education curriculum in Ghana and what is needed to make them good teachers.	• Identify the various domains of the National Teachers' Standards for Ghana and discuss the need for it. • Describe the nature and structure of the basic education curriculum • Distinguish between the assessment benchmarks for phases of basic education in Ghana.
	CLO 3. Exhibit sound knowledge and understanding of relevant philosophical and sociological trends that have influenced education and teaching in Ghana, and develop a personal teaching philosophy and socio-cultural identity (NTECF p.68, NTS 1f).	• Establish the relationships between the key sociological phenomena that have influenced education in Ghana • Trace the philosophical trends of education in Ghana. • Develop and explain their personal teaching philosophy.
	CLO 4. Develop knowledge and understanding of the need for a healthy inclusive school-community relationship (NTS 1g, 2f; NTECF 13).	• Discuss the need for inclusive school-community relationship. • Discuss how to promote a healthy school-community partnership.
	CLO 5. Develop knowledge, understanding of the effects of the use of technology on teaching and learning, and the society and explain how misconceptions about the use of ICT can be addressed (NTS 2f; NTECF 13).	• Debate the effects of the use of technology on teaching and learning and societal values. • Explain how the misconceptions and myths about the use of ICT can be addressed.

	CLO 6. Develop and demonstrate passion and commitment for teaching, continuous professional development, lifelong learning and seeing themselves as agents of change in the school and community (NTS 1b, 1g, p.16).		• Discuss the need to be passionate and committed to teaching. • Examine the need for continuous professional development and lifelong learning. • Reflect and discuss their roles as change agents in the school and community.	
Course Content:	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes:**
	1	Conceptions/misconceptions and barriers to teaching/ learning, SEN and gender.	Conceptions, misconceptions, prejudices of society about teaching, education and learners with SEN; Traditional beliefs and barriers affecting inclusion; need for inclusion; approaches/strategies for promoting inclusion.	Use concept cartoons and talk for learning approaches in discussing misconceptions/barriers; Watching audio-visuals of accomplished teachers and educators and writing reflective notes.
	2	Introduction to National Teachers' Standards for Ghana	The concept teacher and teaching as a profession; characteristics of a good teacher; the concept and types of education; What is the NTS and the domains: Professional values and attitudes, professional knowledge, and professional practice; 21st century teaching skills	Individual and group presentations on teaching professions and characteristics a good teacher; Using Power Point, watching audio-visuals from YouTube and reflective notes; Teacher led discussions on NTS and 21st century teaching skills
	3	Introduction to the basic education curriculum in Ghana	Philosophy and goals of basic education; nature and structure/phases of the basic education curriculum; standards for assessment of the basic education curriculum	Teacher-led discussion on the philosophy and goals of basic education; use concept mapping/models in illustrating nature and phases of the basic education curriculum; mixed ability group presentation and discussion on the assessment benchmarks for basic education

	4	Philosophical and sociological trends of education in Ghana	Sociological trends of education in Ghana; Philosophical trends and aims of education in Ghana; Philosophy of teacher education; Personal teaching philosophy and implications for SEN and the use of ICT in education	Teacher led discussion on sociological/philosophical trends; Use talk for learning approaches for influence of sociological phenomena on education; Individual presentations and reflective notes of personal teaching philosophies
	5	School-community partnership	Concept of school-community partnership; Types of school-community partnership; Principles of school-community partnership; teacher and the learner in the society; Promoting a healthy school-community partnership and benefits.	Fieldtrip to schools in communities on how schools relate with communities; Reflective notes on field trip; Talk for learning approaches for need for school-community partnership; Individual and group projects on how to promote a healthy school-community partnership.
	6	Technology and society	Concept of technology and social coherence; Misconceptions, barriers and myths about use of technology; Abuses and effects of technology on societal values and ethics; Appropriate use of technology for teaching and learning	Student led discussions and debate on the effect the use of technology on teaching/learning and societal values and ethics; Audio-visual analysis of videos from YouTube on effects of technology
	7	Career-paths and lifelong learning in education	Concepts of career path and lifelong learning; Need for lifelong learning; Avenues for lifelong learning (updating & upgrading); Types of career-paths.	Audio-visual analysis and a case study of accomplished teachers and educationists; Use of resource persons and reflective notes on the need for lifelong learning.
Course Assessment (Educative assessment: of, for and as learning)	**Component 1:** Formative Assessment (Individual and Group Presentation). Summary of Assessment Method: Group presentations on misconceptions of teaching; misconceptions/barriers to teaching, inclusive education and use of ICT; student teacher reflective notes on what qualities they need to develop to be a good teacher; presentation on the philosophy, goals, nature and structure of basic education in Ghana. (core skills to be developed: digital literacy, critical thinking, collaboration and communicative skills, personal development) **Weighting**: 30% **Assesses Learning Outcomes**: CLO 1 & CLO2 , CLO5			

	Component2: Formative Assessment (Quizzes) Summary of Assessment Method: Quiz on NTS; 21st century teaching skills and the assessment benchmarks for basic education; The need for inclusive education and how to promote an inclusive school-community partnership. (core skills to be developed: digital literacy, collaboration and communicative skills, personal development, respect for diversity) **Weighting**: 30% **Assesses Learning Outcomes:** CLO 2, CLO4
	Component 3: Summative Assessment (End of Semester Project). Summary of Assessment Method: mixed ability and gender based group semester projects to establish the relationships between the key sociological phenomena that have influenced education in Ghana and tracing the philosophical trends of education in Ghana; reflective notes on their personal teaching philosophies; the need for continuous professional development, choice of career paths in education and their role as agents of change **(groups should work on different themes).** (core skills to be developed: respect for diversity, critical thinking, digital literacy, collaboration and communicative skills, personal development) **Weighting:** 40% **Assesses Learning Outcomes:** CLO 3 & CLO 6
Teaching and learning resources	1. Audio-visuals and animations from YouTube 2. Resources persons 3. Projectors and computers 4. Ministry of Education (2015). Inclusive education policy: Implementation plan. Accra: MoE 5. Ministry of Education (2015). Standards and guidelines for practice of inclusive education in Ghana. Accra: MoE
Required Text (Core)	Aboagye, J. K. (2002). *Historical and philosophical foundations of education in Ghana*. Accra: Media Guard Ltd. Mensah, A., & Addison, K.A. (2012). *Introduction to sociology of education.* Winneba: Institute for Educational Development and Learning Extension. Transforming Teacher Education and Learning (T-TEL) (2017). *National teachers' standards for Ghana*. Accra: Ministry of Education. Transforming Teacher Education and Learning (T-TEL) (2017). *The* n*ational teacher education curriculum framework*. Accra: Ministry of Education.
Additional Reading List	Adu-Yeboah, J. K. (2008). *Practical social studies*. Accra: Kwadwoan. Opare, J. A., Quist, H., Anyagre, P., & Baafi-Frimpong, S. (2016). *Philosophical and social foundations of education.* Cape Coast: College of Distance Education, University of Cape Coast. Prah, I. K. (2004). *A complete textbook on social studies for senior secondary schools* (2nd ed.). Takoradi: Saint Francis Press Ltd.

CONTEXT

Teachers are aware of diversity and uniqueness among learners in their classrooms. They therefore need requite basic skills to be able to identify and address barriers to learning or put measures in place to support individual and small groups of learners with diverse abilities. Also, teachers need skills in enquiry and reflective practices to gather information on individual learners to enable them make instructional decisions to improve learning of all learners in inclusive and multigrade settings.

<table>
<tr><td>Course Title</td><td colspan="7">Inclusive School-Based Inquiry</td></tr>
<tr><td>Course Code</td><td colspan="2"></td><td colspan="2">Course Level: 100</td><td colspan="2">Credit value: 3</td><td>Semester 1</td></tr>
<tr><td>Pre-requisite</td><td colspan="7"></td></tr>
<tr><td>Course Delivery Modes</td><td>Face-to-face: [√]</td><td>Practical activity: [√]</td><td>Work-Based Learning: [ ]</td><td>Seminars: [√]</td><td>Independent Study: [√]</td><td>e-learning opportunities: [√]</td><td>Practicum: [ ]</td></tr>
<tr><td>Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)</td><td colspan="7">This introductory course in basic research is to introduce student teachers to the planning of semi-structured observation to assess the abilities of differently abled learners and the associated barriers to their learning. This is to equip them with skills for diagnosis of different learners and the appropriate Interventions to support their learning. In doing so student teachers acquire data collection, management and evaluative techniques to help them determine the outcomes of the interventions they introduce. In addition, the course will equip the student teachers with skills for reflective practice, self-evaluation and portfolio building. Different interactive approaches (e.g. projects, discussion, outdoor pedagogies) and assessment procedures (e.g. report writing, reflective notes, projects etc.) would be employed. All these are geared toward making student teachers adopt and apply appropriate instructional strategies to enhance learning outcomes of diverse learners during Supported Teaching in Schools It will also enable them to ensure that the interventions they introduce yield the needed results and the evaluation of the interventions will confirm the trustworthiness and authenticity (honesty) of the evidence gathered on different learners (NTS 1a, p.12; 3b, 3f, 3n p.14, NTECF p. 12).</td></tr>
<tr><td rowspan="3">Course Learning Outcomes</td><td colspan="5">On completion of the course the student teacher should be able to:</td><td colspan="2">Indicators</td></tr>
<tr><td colspan="5">CLO 1. Demonstrate knowledge and understanding of the need for inclusive school-based enquiry (NTS 1a, p.12; 3b, 3f, 3n p.14, NTECF p.12).</td><td colspan="2">• Explain the need for inclusive school-based enquiry for supported teaching in the B.Ed. Programme</td></tr>
<tr><td colspan="5">CLO 2. Demonstrate the use of appropriate data collection methods and inventories for varying learning needs and abilities (NTS 1a, p.12; 3b, 3f, 3n p.14, NTECF p.12).</td><td colspan="2">• Identify the characteristics of learners with different needs and abilities
• Explain the various methods of data collection including observation, clinical interviews, etc.
• Develop and explain the use of inventories to identify intervention for diverse learners</td></tr>
</table>

	CLO 3. Demonstrate the use of the learning stories and socio-cultural approaches in school based enquiry (**NTS 1a, p.12; 3b, 3f, 3n p.14, NTECF p.12).**			• Explain the current approaches for profiling learners • Use any of the current approaches in profiling the learning journey of a selected child.
	CLO 4. Manage data and demonstrate application of appropriate interventions and activities to address varying learning needs (**NTS 1a, p.12; 3b, 3f, 3n p.14, NTECF p.12).**			• Collect and analyse data on different aspects of differently abled learners with various tools. • Apply appropriate intervention activities to support their learning.
	CLO 5. Demonstrate the use of effective evaluative and reflective skills in classroom-based inquiry (**NTS 1a, p.12; 3b, 3f, 3n p.14, NTECF p.12).**			• 5.1 Prepare evaluative and reflective notes that portray the true reflection of interventions implemented. • 5.2 Show an appreciation of honesty in data presentation and respect for learner diversity.
	CLO 6. Develop teaching portfolio with relevant manual and digital artefacts and appreciate the need for keeping accurate data and profile of learners (**NTS 1a, p.12; 3b, 3f, 3n p.14, NTECF p.12).**			• Develop teaching portfolio with relevant artefacts. • Explain the need for keeping accurate data and profile of learners' learning journey.
Course Content: Inclusive school-based Inquiry	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes:**
	1	Introduction to supported teaching in schools through school based enquiry	Meaning, types and characteristics of school-based inquiry	Teacher led discussion on the need for STS; Field trip to schools in nearby communities to observe supported teaching; pyramid discussions on the need for school based enquiry.
	2	Processes of inquiry	Introduction to early Identification and characteristics of learners with diverse needs and abilities; Types of observation; developing Inventories and checklist for observation	Teacher led discussion; Audio-visuals of learners with SEN; Group project on development of inventories. This should be co-planned and co-taught with SEN specialists

	3	Data collection approaches	Learning stories approach; socio-cultural approach	Talk for learning approaches on current approaches of child study; Individual Child study project; fieldtrip to schools in nearby communities; demonstrate the use of inventories in profiling learners
	4	Implementing intervention activities	Using Games, demonstration, fieldtrips, role plays, individual and group projects; intervention and referral of learners with SEN Intervention Strategies (i.e. trouble shooting-checking if hearing aids are functioning; seating arrangements; use of assistive devices; Individual attention; Task analysis; Behaviour modification	Demonstrating the design and use of various interventions/activities; audio-visuals on the use of interventions to support learning; analyse data on learners using appropriate applications/ tools. This should be co-planned and co-taught
	5	Evaluation and reflection	The need for evaluation and reflection	Student led discussions on evaluation of interventions; writing reflective notes on the effectiveness of some interventions.
	6	Developing portfolios and anecdotal records	Portfolio artefacts (digital and manual) e.g. child study report, reflective notes, inventories for data collection, pictures, videos, classroom exercises, tests, projects, marking schemes	Compiling various artefacts for Individual portfolios; developing E-portfolios; concepts maps to organise thoughts on the need accurate data presentation and keeping.
Course Assessment	**Component 1**: Formative assessment (Quiz) Summary of Assessment Method: Quiz on the need for inclusive school-based enquiry for supported teaching, the characteristics of learners with different needs and abilities and current approaches; Group projects on developing inventories. (core skills to be developed: respect for diversity, critical thinking, digital literacy, collaboration and communicative skills) Weighting: 20% Assesses Learning Outcomes: CLO 1, CLO 2 (2.1, 2.2 and 2.3) and CLO3			

Course Assessment (Educative assessment: of, for and as learning)	**Component 2**: Formative assessment (Projects) Summary of Assessment Method: End of Semester individual child study project (not more than 10 pages) using any current approach and portfolio assessment. (core skills to be developed: respect for diversity and individual differences, critical thinking, digital literacy, honesty) Weighting: 40% Assesses Learning Outcomes: CLO 4, 5 and CLO 6
	Component 3: Summative assessment (Examination) Summary of Assessment Method: End of Semester Examination on unit 2, 3, 4 and 5 (core skills to be developed: critical thinking, personal development) Weighting: 40% Assesses Learning Outcomes: CLO 2, 3, 4 & 5
Teaching and learning resources	1. Audio-visuals from YouTube 2. Samples of Individual Learning Plans 3. Samples of diagnostic tools **4.** Samples of inventories and checklists
Required Text (Core)	Ackummey, M. A. & Kankam, G. (n.d.). *Educational action research*. Winneba: Centre for Teacher Development and Action Research. Dampson, D. G., & Mensah, D. K. D. (2014). *A practical guide to action and case study research.* Kumasi: Payless Publication Ltd Fraenkel, J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education*. New York: McGraw-Hill. Kankam, G. & Weiler, J. (2010). *A guide to action research for colleges of education and universities*. Accra: Readwide Publishers
Additional Reading List	Ammah,C. (2016). Developmental psychology for educators. Accra : Janlex Ventures Berlinder, D. C. & Calfee, R. C. (Eds.) (2006). *Handbook of educational psychology*. New York: Macmillan, Brown and Benchmark. Berk, L. E. (2012). *Infants and children: Prenatal through middle childhood* (7th ed.). Toronto: Allyn & Bacon. Bronfenbrenner, U. (2009). *The ecology of human development: Experiments by nature and design*. Cambridge, Massachusetts: Harvard University Press. Cohen, L., Manion, L., & Morrison, K. (2011).*Research methods in education (7th ed.)*. New York: Routledge. Collins, J. (2004). Education techniques for life-long learning. *Radiographics, 24,* 1484-1489. Mugenda, O. M., & Mugenda, A. G. (2009). *Research methods: Quantitative and qualitative approaches*, Nairobi: Acts Press. Turnbull, A., Turnbull, R. & Wehmeyer, M.I. (2010). *Exceptional lives: Special education in today's schools* (6th ed.). New Jersey: Pearson.

Language and Literacy

CONTEXT

This is a foundation course for all student teachers and is aimed at preparing them in the use of language in the classroom.Every teacher, irrespective of their area of specialisation should have orientation in language and literacy and promote it among their learners but teachers are not trained well to handle this situation. Knowing how diverse children acquire language is crucial to all teachers because it helps them to communicate at the level of their students and make lessons meaningful to all manner of learners irrespective of their language needs and interests. However, teachers have not been trained properly to communicate effectively to reach all children irrespective of their language backgrounds. In a multilingual society like Ghana and its classroom, student teachers must be trained to handle children with different linguistic, and cultural background to be able promote their language learning. There is also the misconception that teaching learners, especially at the Upper Primary level in the L1 does not promote learning. This course is also to transition student teachers of having knowledge in language learning to becoming teachers of language and how to use language in their teaching. This course therefore seeks to prepare teachers to have background knowledge in language and literacy and their role as teachers in promoting it and to address the misconception of L1 use at the Upper Primary level.

Course Title	**Introduction to language and literacy**						
Course Code		**Course Level: 100**		**Credit value: 3**		**Semester 1**	
Pre-requisite							
Course Delivery Modes	**Face-to-face** ☒	**Practical Activities** ☒	**Work-Based Learning** ☐	**Seminars** ☒	**Independent Study** ☒	**E-Learning Opportunities** ☒	**Practicum** ☐
Course Descriptionfor significant learning (indicate NTS, NTECF to be addressed)	The course is designed to introduce student teachers to the basic principles of language and literacy. It focuses on equipping student teachers with the requisite rudimentary concepts that will guide them to acquire and understand the necessary knowledge and skills about language and literacy to enable them to use language effectively to enhance literacy development skills of all learners. It will help student teachers to understand and identify how children acquire language and apply it in their language and literacy classroom. The course covers key areas like the nature of language and communication, knowledge and understanding of the nature and concept of language and literacy, theories of language acquisition, and bilingual education and challenges to developing literacy among all learners.The course also provides opportunities for school visits for student teachers to observe and interact with teachers to see how language and literacy issues are handled in the basic schools, identify the practical problems encountered in the implementation of the theories and principles, critically examine them and attempt to resolve them. The course will equip student teachers with the IT know-how to apply them in their learning						

	and teaching. This course will be delivered using learner centred approacheslike discussion, problem solving, questions, brainstorming, group/individual work, self-study, school visits, observation and methods that take all manner of learners into consideration. The mode of assessing student teachers includes quizzes, examinations, report writing, assignments, group work and class participation. The course seeks to fulfil the following NTS and NTECF requirements: NTS 1e, 1f, 2b, 2c, 2e, and 3b, and NTECF 1, 5, 6, 9 (p25).	
Course Learning Outcomes with indicators	**Learning Outcomes** On successful completion of the course, student teachers will be able to:	**Indicators**
	1. Demonstrate knowledge and understanding of the nature and concept of language and the concept of literacy(NTS 2c)	• Explain the concept and nature of language and literacy • Distinguish between language and literacy
	2. Demonstrate knowledge and understanding of the theories of both L1 and L2 acquisition and see how they apply to language learning (NTS 2e)	• Critically examine the theories of both L1 and L2 in language acquisition • Discuss how these theories help them to deal with language learning in their classroom, especially at the Upper Primary level. • Address misconceptions of using L1 as medium of instruction and as subject of study.
	3. Acquire knowledge and understanding of the stages of language acquisition and apply them in the language and literacy development of learners (NTS 3b, NTECF P25 bullet 5)	• Reflect on the stages of language learning in both L1 and L2 and how they differ among learners. • Discuss how understanding of the stages of language acquisition can be used to improve the literacy skills development of diverse learners. • Discuss how the stages will shape their communication/language use in the classroom to benefit all manner of learners.
	4. Demonstrate knowledge and understanding of bilingual education and identify how it impacts language and literacy development of learners.(NTS 2c, NTECF p.25 bullets 1 and 9)	• Discuss the concept and types of bilingual education • Examine the cognitive, linguistic, psychological importance of bilingual education • Evaluate how bilingual education impacts

		language and literacy development of diverse learners.
	5. Reflect on challenges to developing literacy among all learners and how to address these challenges.(NTS 1e)	• Discuss the challenges of children's literacy development, especially at the Upper Primary level as it relates to diversity of learners. • Critically reflect on the ways these challenges can be addressed to make all manner of learners develop their literacy skills in the learning process.
	6. Work collaboratively and observe in small groups in schools under the supervision of a mentorto develop language and literacy skills of diverse learners and their own skills as would-be teachers. (NTS 1f, 2b, NTS 3b)	• Discuss with language and literacy teachers the major role literacy plays in learning across the various academic disciplines • Discuss with language and literacy teachers issues hindering or promoting language and literacy development in their classroom. • Familiarise themselves with the literacy component of the school curriculum • Identify the backgrounds of all learners • Interact with small groups of learners on issues about language and literacy to shape their understanding of language and literacy and its relationship to language learning and academic work • Identify their strength and needs as student teachers and how to work towards developing their skills of using appropriate language to address the needs of all manner of learners.

Course content	Units	Topics	Sub-topics	Teaching and learning activities to achieve learning outcomes
	1	**Nature and concept of language and literacy**	1.1.1Definition and characteristics of language 1.2 Stages of literacy development/acquisition 1.2.1 Foundation for literacy 1.2.1 Beginning literacy 1.2.3 Consolidation/Fluency 1.2.4 Literacy for growth 2.3. Challenges to developing literacy among learners	1. **Discussion** (student teachers discuss in groups the nature, concept and characteristics of language and communication and present their findings orally to class) 2. **Questioning/Brainstorming**(students brainstorm on stages of literacy development among learners) 3. **Group work presentation** (student teachers are put in groups find information (e.g. Online, books) on the challenges to developing literacy among learners)
	2	**Theories of Language acquisition/learning**	2.1. Behaviourist 2.2. cognitivist 2.3. Developmental perspectives etc.	1. **Seminar/presentation** (students are tasked in groups to research on the various theories of language acquisition and present in class) **2. Discussions** (teacher leads students teachers compare and contrast the different theories through use of leading and probing questions) 3. **Debate**(In groups, students debate on the pros and cons of the various language acquisition theories)
	3	**L1 and L2 acquisition**	3.1. Stages of L1 acquisition 3.1.1 Pre-language stage 3.1.2 One-word stage 3.1.3 Two-word stage 3.1.4. Telegraphic stage 3.1.5 Later multiword stage 4.2. Determinants of L1 acquisition 4.2 .1 Imitation and correction 4.2.2 Parental speech	1. Lecture/Discussions (Lecturer introduces the topic and leads students in class discussions on the stages and processes of L1 acquisition) 2. Group work (students are put in groups to research on the determinants of L1 and L2 acquisition and present to class for discussion)

			4.2.3 Cognitive development 4.2.4 Inborn knowledge 4. 3 Stages of L2 acquisition 4.3.1 Pre-production stage 4.3.2 Early production stage 4.3.3 Speech emergence 4.3.4 Intermediate fluency 4.3.5 Advanced fluency 4.4. Differences between L1 and L2 acquisition	3. Case study (Students teachers interact with learners and find out from them how they acquired their L1 and L2 (if any) and presents report) 4. Pair work (student teachers work in pairs to brainstorm on the differences between L1 and L2 acquisition and share with the entire class)
	4	**Bilingual education in Ghana**	5.1. Definition of BE and types 5.1.1 Transitional Bilingual Education 5.1.2 Immersion 5.1.3 Submersion 5.1.4 Maintenance etc. 5.2 The language situation of Ghana. 5.3. The language situation of Ghana 5.3. Language policy of education in Ghana 5.4. Challenges of the	1. Discussion/brainstorming (teacher introduces the topic and leads discussion on the definition of bilingual education and its types). 2. Concept mapping (students teachers are put into groups to make a concept map of the languages in Ghana and present to class for discussion) 3. School observation (students visit partners schools to get first-hand information on how teachers implement the bilingual education language policy in schools and identify languages present in the classroom and write reports) 3. Debate (Students teachers debate in groups on the pros and cons of using L1 or L2 as medium of instruction) 4. Group work (Students teachers are put in groups to discuss the practical challenges of implementing the language of instruction policy in Ghana as observed during their school visit and how the can be addressed and present to class for class discussion)

			language policy of education in Ghana	
	6	The Language/literacy teacher	6.1.1 Characteristics of a good literacy teacher 6.1..2 The language/literacy teacher 6.1..3 Becoming a good literacy teacher	1.Field work/ Observation (students visit partner schools to familiarise themselves with how literacy is promoted among children and write reports on it) 2. Problem solving (students are giving real life and fictional cases that presents particular challenges to literacy development to find suggested solutions to them) 3. Group Discussion (Student teachers discuss in groups the characteristics of a good literacy teacher and share with class) 4. Individual Study (student teachers work individually to indicate things they will do to become good literacy teachers in a one page paper)
Course Assessment (Educative assessment of, for, and as learning)	**Component 1**: COURSEWORK - Summary of Assessment Method: Assessment of learning (2 short Exams for diagnostic purposes) on what is literacy, who is a good literacy teacher, dealing with challenges of literacy development,types of bilingual education, theories and stages of language acquisition and challenges of children's literacy development (Core skills targeted include communication, critical thinking, collaboration, observation and enquiry skills, digital literacy, Weighting: 30% Assesses Learning Outcomes: Course Learning outcomes assessed1-6			
	Component 2: COURSEWORK Summary of Assessment Method: Assessment for and as learning (1 group presentation, 1Individual presentationand class participation (Core skills targeted are communication, team work/collaboration, enquiry skills, digital literacy) Weighting: 40 % Assesses Learning Outcomes: Course learning outcomes 4, 5, and 6			
	Component 3: COURSEWORK Summary of Assessment Method: 1 Observation and report writing on school visits to begin their portfolio building (Core skills targeted are communication, collaboration, critical thinking) Weighting: 30% Assesses Learning Outcomes: Course learning outcomes measured 5 and 6.			

	Instructional Resources	1. Computer 2. Projector 3. Recordings of children's language
	Required text	Owu-Ewie, C. (2018). *Introduction to language teaching skills: A resource for language teachers.* Accra: Samwoode Publishers
L	**Reading List**	Berko Gleason, J. (ed) (2005). *The development of language (6th ed).*Needam Heights, MA: Pearson Byrnes, J. P. &Wasik, B. A. (2008). *Language and Literacy Development: What Educators need to know*. New York, NY: Guilford Press Carroll, M. J., Bowyer-Crane, C., Duff, F. G., Hulme, C. &Snowling, M. J. (2011). Develo*ping language and literacy: effective intervention in the early years*. West Sussez, UK: Wiley-Blackwell. Owens, R. E. (2001). *Language development: An introduction (5th ed*). New York: Merrill. Saxton, M. (2017). *Child language: Acquisition and development.* Thousand Oaks, CA: Sage Publications.

Mathematics /Numeracy

CONTEXT

National and international assessments results consistently indicate that a few (< 25%) of our basic school pupils possess the mathematical proficiency needed to access the opportunities that the 21st century offers them. The low performance is largely as a result of an education system that appears to direct focused attention on preparing students for passing examinations, at the expense of helping them to develop core skills such as critical thinking, creativity, digital literacy, reflection and evaluation they will need to participate fully in society. Teachers often tend to present mathematical concepts, work several examples on the board, and then assign exercises in which learners practise whatever has just been presented, that is, an approach that has been widely criticised. The learning experiences, thus, appear to ignore the varied uses of mathematics in different local contexts to amplify the beauty of mathematics in solving real-life problems nor do they take account of learners' differing language and literacy abilities, accessibility and inclusivity issues. In addition, respect for culture and diversity as well as affording learners the opportunity to make connections between local and global contexts and then share their understanding with others appear limited in most of our mathematics classrooms. Given the incredible power that teachers hold to make a difference to pupils' mathematical development, a reasonable point of entry for changing the narrative is a teacher education curriculum that inspires and develop highly-competent, reflective teaching professionals committed to the holistic development of their pupils and the improvement of society. This course plays an important role in this regard.

Specific attention is given to topic areas that have consistently been flagged up in chief examiners' reports for senior high school core mathematics as difficult.

Course Title	**Introduction to Learning and Applying Number and Algebra**						
Course Code		**Course Level**	**100**	**Credit value:**	**3**	**Semester**	**1**
Pre-requisite	**Senior High School Mathematics**						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	There is the need to do auditing of subject knowledge to establish and address student teachers' learning needs, perceptions and misconceptions in Number and Algebra. Knowledge, skills and understanding of fundamental concepts of Number and Algebra, as well as, the ability to identify one's own individual characteristics (culture, ethnicity, religion, family constellation, socio-economic background, dis/ability, etc.), can lead to a student teacher's ability to apply these two areas of mathematics in patterning, generalisation and algebraic reasoning in reminding the student teachers of the role of deductive reasoning in developing mathematical ideas. Algebra is about generalized mathematical thinking arising from seeing patterns and relationships. Strong foundations in Number and Algebra can help student teachers to develop confidence in demonstrating their mathematical abilities. For that reason, this course is designed to help student teachers to develop demonstrable confidence to explain or justify their thinking, based on their observations, the patterns they have observed, or what they know about numbers and algebraic relationships. As they do so, they develop confidence in teaching related topics in Number and Algebra to their pupils at the respective grade levels. Topics in Number and Algebra include recognizing and developing patterns, using numbers and number operations, properties of numbers, concept of sets, number bases and modulo arithmetic, and algebraic expressions. In addition, student teachers will explore operations on algebraic expressions, apply mathematical properties to algebraic equations and functions. Using many examples of different local and global contexts, student teachers will solve mathematical problems using equations, graphs and tables to investigate linear and quadratic relationships. ICT tools and other manipulative materials will be used to introduce student teachers to the concepts listed above and to extend their conceptual understanding of the areas under study. The course will focus on *mathematical content* on one hand and the *strategies and learning experiences in doing mathematics* on the other hand. These will be combined to form an integrated instructional approach that addresses the course learning outcomes. Differentiated approach to teaching will be used to ensure that student teachers will be supported in the area of Number and Algebra. The instructional strategies will pay attention to all learners, especially girls and students with Special Education Needs. The course will be assessed using a variety of assessments methods including coursework (assignments, quizzes, project works and presentation) and end of semester examination to provide a comprehensive outlook of student teachers' competencies and skills. References are made to the following (NTS, 2b, 2f, 3j; NTECF p.30).						

Course Learning Outcomes (CLOs) with indicators	Outcomes	Indicators
	On successful completion of the course, student-teachers will be able to: **1.** Demonstrate deep understanding of working with key mathematical concepts in the Number and Algebra content domains in the basic school mathematics curriculum (professional values, knowledge & practice) (NTS 2b)	• Outline and address their perception and misconceptions about concepts in Number and Algebra. • Select and use the most appropriate mathematical method(s) or heuristics in carrying out tasks/exercises/problems in number and algebra within the basic education mathematics curriculum. • Make connections between mathematical co**nce**pts in the Number and Algebra content domains and applying them in teaching and solving real-life problems. • Identify and resolve mathematics related learning difficulties within the number and algebra content domains.
	2. Use manipulatives and other TLMs including ICT in a variety of ways in learning mathematics concepts (practical skills, digital literacy, problem solving) (NTS 3j)	• Use manipulatives and other TLMs in developing number and algebraic concepts. • Use ICT as a tool in developing number and algebraic concepts in the basic school classroom. • Use drawing tools to conduct number and algebraic investigations emphasising visualization, pattern recognitions, conjecturing, etc. • Solve mathematics problems using manipulatives and/or technology related strategies in a variety of ways. • Use adaptive TLMs to support pupils with SEN
	3. Demonstrate value as well as respect for equity and inclusion in the mathematics classroom (knowledge)(NTS 2f)	• Discuss personal perception about individuals with special needs in learning number and algebra. • Examine student teachers own misconceptions about number and algebra. • Appreciate the contributions of colleagues in the mathematics classroom. • Support colleagues in the mathematics classroom. • Cooperate with colleagues in carrying out mathematics tasks. • Engage in reflective thinking about how mathematics was taught in student-teacher's basic and high school days.

	4.	Demonstrate awareness of core skills, individual characteristics and socio-cultural issues in teaching and learning mathematics in the content domains (knowledge) (NTS 2f).		• Address Socio-cultural issues emerging from the teaching and learning of mathematics. • Reflect and show how student teachers' mathematics history influences their views of mathematics and its learning.
Course content	**Unit**	**Topics**	**Sub-topics/theme (if any):**	**Teaching and learning activities to achieve learning outcomes**
	1	Numbers and Numeration systems : *Learning, teaching and applying*	Development of Real number, up to Irrational. Misconceptions and barriers in teaching and learning number	Discussion of student teachers' perception and misconceptions about concepts in Number and Algebra. Investigations and Mathematical problem-solving strategies involving numbers will be used. Using various collaborative activities including think pair, share, group work and role play that will lead to the development of the numeration system. Using various collaborative activities to address misconception and barriers in teaching and learning number.
	2	Operations and Properties on Integers (number sense): *Learning, teaching and applying*	Operations of Integers Properties: Closure, commutative, associative, distributive, identity, inverse properties	Use of manipulative as well as the number line for the operations. Using Investigations to explore properties. Use of Mathematical problem-solving strategies. Eg. Word problems, study and discuss concepts in a given task
	3	Operations and properties of rational and irrational numbers: *Learning, teaching and applying*	Naming of fractions. Operations on common fractions, decimals number, percentages and irrational numbers. Properties of rational (including density property) and irrational numbers. Place values decimal places,	Explore misconceptions of fractions, through discussions. Use fractional models and visual aids (TLMs) and developing multiple representations for a single mathematical concept. Use the concept of square roots to establish the notion of irrational numbers. Explore number of fractions between any two given fractions through activity method.

			approximations; significant figures including rounding off numbers and standard form.	Make connections among common fractions, decimals and percentages, with degree of accuracy, using manipulatives and visual aids (TLMs). Approximate given numbers to a specified values using number lines and other TLMs.
	4	Concept of Sets: *Learning, teaching and applying*	Sets of numbers, eg., even and odd numbers, multiples, factors, prime numbers, squares, cubes, perfect numbers. Venn diagrams (two and three set problems), word problem	Transition from set of numbers to real life groupings. Use real life situations involving groupings with certain characteristics.
	5	Algebraic expressions, equations and inequalities: *Learning, teaching and applying*	Simplification, expansion and factorization, Solving linear equations and inequalities	Explore the meaning of variables using drill and practice. Transitioning from number to algebra. $(\text{Eg.}\, 2 + 3\,;\, 2 + x)$. Use models and appropriate diction to deal with misconceptions of algebraic expressions (e.g. using algebra tiles to demonstrate identities). Apply the distributive property to expansion. Use inverse of numbers and operation principles. Use methods of elimination, substitution and graphical approach
	6	Every day and commercial arithmetic : Learning, teaching and applying	Ratio, rates, proportion, scales, percentages (taxation, discount, commissions, VAT, etc.)	Investigations and Mathematical problem-solving strategies Using applications to real life situation Mathematical discourse: Learning by talking
	7	Number bases and Modular arithmetic: Learning, teaching and applying	Expressing numbers of different bases; binary (base two), base five, base eight, and base ten. Cyclic variable, concept of modular arithmetic, addition and subtraction of modular arithmetic, multiplication in modular arithmetic.	Use of polygonal shapes to explore to number bases and modular arithmetic, Application to real life situations through presentations, Using models to represent place value concept with respect to different bases. Using place value model and chat to explore different number bases

	8	Relations and Functions and algebraic graphs: Learning, teaching and applying	Types of Mapping/Relation, functions; domain, co-domain, range, inverse, composition and graphs.	Using mathematical explorations, transitioning from number patterns to algebraic ideas.
Course Assessment (Educative assessment: of, for and as learning)	**COMPONENT 1:** Examination **Summary of Assessment Method**: Student teachers should be summatively assessed by an examination linked to the themes listed below: • knowledge, understanding and applications of the key mathematical concepts in number and algebra within the basic school mathematics curriculum. • use manipulatives and other TLMs including ICT in a variety of ways to establish number and algebraic concepts in the classroom • how their mathematics history influences their views of mathematics and its learning • relevant professional values and attitudes for teaching mathematics at Upper Primary level **Weighting: 40%** **Assesses Learning Outcome(s):** CLO 1, 3, 4; (NTS 2b, 2f)			
	Component 2: Coursework 1 **Summary of Assessment Method**: Individual Assignments with Presentations: Student teachers may be asked to • write on how mathematics problem can be solved using ICT tools as strategies in a variety of ways. • select the most appropriate mathematical method(s) or heuristics (i.e. using mental strategies, models, paper and pencil, etc.) in carrying out tasks / exercises / problems in number and algebra in the school mathematics curriculum. • reflect on how mathematics was taught in their basic school days and compare with current practice in basic schools. • reflect on the core skills (e.g. communication and collaboration, critical thinking and problem solving, digital literacy) teachers need to develop to make them good teachers. • do peer assessment on awareness of core skills needed to enhance own strengths and address limitations regarding the teaching of Number and Algebra. **Weighting: 40%** **Assesses Learning Outcome(s):** CLO 1- 4 (NTS 2b, 3j)			

	Component 3: Coursework 2 **Summary of Assessment Method**: Self-Assessment (as part of their portfolio): Students teachers should be given an assessment tool or questionnaire at the onset and the end of the course to • do self-assessment and compare their attitude towards learners, mathematics teaching and readiness to support learners who have misconceptions or struggle with the subject. • do self-assessment and compare their value as well as respect for equity and inclusivity in the mathematics classroom. • reflect critically on their own learning experiences and use them to plan for their own continuous personal development. • identify and reflect on mathematics related learning difficulties within the number and algebra content domain. **Weighting: 20%** **Assesses Learning Outcome(s):** CLO 3, 4 (NTS 1a, 2f)
Teaching/ Learning Resources	Maths posters; Manipulatives and visual aids Computers Graph sheets Set of Mathematical instruments Paper grids
Suggested reference (Compulsory texts)	Gordor, B. K., Naandam, S. M., & Nkansah, B. K. (2012). *Core mathematics for senior high schools*. Accra: Sam-Woode Ltd
Addition Reading List	Backhouse, J. K., Houldsworth, S. P. T. & Horril, P. J. F. (2005). *Pure mathematics 1*. (Seventh edition). London Longman. Hesse, C. A. (2012). *Core mathematics for senior high schools*. Accra: Akrong Publications Ltd. Martin, J. et. al. (1994). *Mathematics for teacher training in Ghana: Tutor notes*. Accra: Unimax Publishers. Martin, J. et. al. (1994). *Mathematics for teacher training in Ghana: Students activities*. Accra: Unimax Publishers. Ministry of Education (2015). *Core mathematics modules for SEIP*. Accra: Ministry of Education. Ministry of Education. (2010). *Teaching syllabus for core mathematics* (Senior High School). Accra: Ministry of Education, Science and Sports.

Science

CONTEXT (B4-B6)

Science teaching and learning in pre-secondary school has a myriad of challenges. Some of these are the perceived difficulty of science concepts from both teachers and learners alike because some of the contents do not relate to learners' environment with emphasis on male domination in the sciences over female. Females perceive science as a difficult subject and thus shy away from it. There is strong perception that females perform well in language use than males and are more careful and meticulous than males. Besides, careers in science are often seen as male careers culturally. Learning activities have to be structured in such a manner that all learners will be able to work in free, collaborative and engaging environments to build logical and sequenced concepts from their personal (but guided) experiences. This will imply engaging in integrated teaching- bringing in ideas to facilitate concept formation from various disciplines, cultures and activities.

The learning activities for this semester therefore seeks to relate science to the learners' environment, make science culturally relevant, be gender and inclusivity friendly, provide for professional scientific attitudes and skills such as critical thinking, honesty, patience, sincerity, precision, and accuracy, have sensitive concepts explained within the appropriate local dialect and/or practices, and address misconceptions that could prevent students of diverse abilities and strengths from participating in any science lesson, integrate practical science activities into lessons. Age specialisms and transitions will be taken into consideration by incorporating special requirements for grade-level and age-level transitions into everyday lessons. Since most teachers possess low ICT competence levels, ICT will be incorporated into teaching strategies and procedures to make sure that student teachers gain the required technological pedagogical content knowledge for various science topics. The science teacher must ensure that different abilities and strengths/needs are catered for to ensure a safe working environment and equal opportunities for all group work and all practical activities.

Integrated Science, Year 1, Semester 1

Course Title	**Introduction to Integrated Science I**						
Course Code		**Level 100**	**Credit value: 3**				**Semester: 1**
Pre-requisite	**None**						
Course Delivery Modes	**Face-to-face** ☒	**Practical activity** ☒	**Independent Study** ☒	**Work-Based Learning** ☒	**Seminar** ☐	**e-learning opportunities** ☒	**Practicum** ☐
Course Description	The course for semester one of year one integrated science reviews and consolidates the basic science concepts of the student teacher (NTS 2c, p.13) on the nature of science and matter. Some of the topical issues the course deals with are; concepts of matter, measurement, safety precaution in laboratories and forces. The student teachers are also introduced to the child study styles, the new primary curriculum and how to begin developing the portfolio for the Student Reflective Journal (SRJ) (NTS 3e, p. 14). Appropriate pedagogies such as discussions, talk-for-Learning approaches to identify important concepts, school visits, storytelling to trace events, concept mapping to define conceptual frameworks, pyramid discussions, simulations and multimedia presentations will be applied in the teaching and learning process of the student teachers. Acquisition of desired knowledge, professional knowledge and professional practice will be applied in the teaching and learning process. This course will be assessed through quizzes, presentations, practical activities and reports from work-based school visits. Also, the use of checklist to identify critical values and skills, miniprojects, jigsaw puzzle, modelling and practical activities will be applied to assess the student teachers. Student teachers will be able to demonstrate adequate understanding and knowledge of the course and will be able to apply their understanding in the teaching process in their practicum and for later years. Also, the student teachers will have the essential attitudes and values, such as honesty, carefulness and accuracy (NTS 1a, p.12) in their professional career.						

Course Learning Outcomes	**Outcome:** On successful completion of the course, Student teachers will be able to:	**Indicator** Indicators for each Learning outcome.
	1. Narrate the evolution of science and Identify some misconceptions/incorrect scientific ideas about specified science beliefs (NTS 1f, p.12; 2c, p.13; 3m, p.14)	• Present concept cartoons, story boards, concept maps that show the chronological evolution of science. • Provide records that show student-teachers' explanation of natural phenomenon using scientific knowledge. • 1.3 Prepare documentary evidence/report of some identified misconceptions and how they were corrected.
	2. Communicate the basic ideas about the nature and diversity of matter (Particulate nature of matter, Classification of matter) and map out the interactions between matters and discuss their interconnectivity as well as their effects on the environment using ICT, bearing in mind the diverse nature of learners and their unique strengths. (NTS 2c, p.13, NTS 3c, 3j, 3f, p.14)	• Construct a story board that shows the diversity of matter. • Provide a conceptual framework of the concept of matter (Solid, Liquid and Gas) • Show models and images that trace the diversity of matter. • Show diverse mind maps that illustrate pathways for changing matter from one state to another. • Develop activities on the interconnectivity among the three states of matter (using water). • Provide a reflective/critique on YouTube/Computer simulations that explain science interactions.
	3. Use fundamental quantities and derived quantities that portray the relationship among matter. (NTS 2c, p.13)	• Prepare a list/chart of diverse activities that show that student teachers can identify appropriate measuring units for given quantities. • Provide charts that show the relationship between fundamental and derived units.
	4. Describe the movement of the Earth that translates into day and night and demonstrate basic and understanding in First Aid and first aid skills (NTS 2c, p.13)	• Prepare descriptions/reflective report with diagrams from student teachers' workbooks about the occurrence of day and night. • Prepare a first aid box.

				• List the importance of first aid. • List the first aid skills for resuscitation.
	5. Show evidence of basic knowledge in pedagogy, literacy and supported teaching and develop the template for professional portfolio (NTS 2c, p. 13; 3a, p.14)			• Review sketches/photographs of science teachers at work. • Produce a template of student teachers' portfolio and the necessary requirements/artefacts.
	5 Demonstrate values such as critical thinking, patience, precision, accuracy, honesty and orderliness through group and individual practical work and basic ability to work as a professional science teacher in school to identify their own professional needs in terms of science professional practice, knowledge, values and attitudes (NTS 1d, p.12; 3k, p.14, 3e, p.14; 1a, p.12)			• Prepare checklist that students used to identify values such as patience, critical thinking, precision and accuracy in a peer review exercise/activity. • Produce list of attributes of a professional science teacher (content knowledge). • Produce list of attributes of a professional science teacher (attributes such as honesty, carefulness and accuracy.
Course Content	**Units**	**Topics:**	**Sub-topics (if any)**	**Teaching and learning activities to achieve learning outcomes**
	1	History of Science in Ghana	i. Evolution of science ii. Contribution of eminent scientists (Prof. Allotey, Marian E, Addy, Isaac Newton, Stephen Hawkins and science teachers in one's school) iii. Common misconceptions in/about science	i. Concept cartoon or story boards that capture the evolution of science inclusive, multi-grade, and developmentally appropriate classrooms. ii. (a) Story telling about eminent scientist in Ghana and elsewhere. (b) Videos/Role Models to share their experiences. iii. (a) Higher order probing questions and open-ended questions to identify misconceptions and incorrect ideas in an inclusive, multi-grade, and developmentally appropriate classrooms.

			iv. Physical science and society v. Science for environment, health, peace and equity vi. Science Process and Product	(b) Use probing questions to explore teacher bias and/or beliefs and how they can impact the learning of science. iv. Concept mapping to explain the connection between science and society and environment. v. Diagrams/photos/charts showing some of the benefits of science. vi. Concept mapping to explain the process and products of science.
	2	Concepts of matter	i. Definition of matter ii. Classification of matter (living things & Non-living things) iii. States of matter and change of states (A simple practical model for the three states of matter using water)	• Questioning/diagnostic tools (such as tiered exercises that require learners to give reasons for choices) to identify misconceptions/incorrect ideas about the concept of matter. • Concept maps thatshow the distinction between living and non-living things in an inclusive, multi-grade, and developmentally appropriate classrooms. • Problem-based teaching in groups to develop simple models of the states of matter.

	3	Safety Precautions in the Laboratory and First Aid	i. Safety precautions and interpretations of safety symbols ii. Proper handling of chemicals and specimen in the laboratory iii. Importance of first aid iv. Basic resuscitation skills	i. (a) Videos and charts to initiate discussions about misconceptions/incorrect ideas about safety measures and symbols. (b) Pyramid discussions on general safety precautions in the laboratory. (c) Mind maps on the interpretation of safety symbols in the laboratory and the school compound. ii. Story Board on proper handling of chemicals and specimen to prevent laboratory accidents. iii. Showerthought on the importance of first aid. • Video/multimedia presentations on basic resuscitation skills.
	4	Measurement of Physical Quantities	i. Units and quantities of measurement (Fundamental and Derived Quantities and their measuring instruments) ii. Measuring accurately-mass, length, volume (ensuring honesty, carefulness humility, and accuracy)	i. (a) Open-ended questions to elicit misconceptions/incorrect ideas about physical quantities. (b) Practical activities that require the use of measuring instruments (Ensure that different abilities and strengths/needs are catered for to ensure a safe working environment and equal opportunities). iii. Concept mapping of quantities and their instruments of measurement.
	5	Forces	i. Types of forces	i. Simulations and multimedia presentations on types and uses of forcesin an inclusive, multi-grade, and developmentally appropriate classrooms.

			ii. Definition of force iii. Uses of forces	ii. Videos, charts and inclusive-friendly models that portray the concept of force to bring out misconceptions and incorrect ideas on forces iii. Practical activities on the application of force in everyday life
	6	Earth movement	i. Rotation and Revolution of the earth ii. Formation of Day and Night	i. Open-ended questions to identify misconceptions/incorrect ideas on earth movement ii. (a) Simulations and multimedia presentations (using ibox) on the occurrence of day and night. (b) Role Play on the rotation and revolution of the Earth
	7	Child Study styles and self-awareness	i. Children's learning styles and the inquiry approach ii. Self-Awareness conscientisation iii. The concept of a 'portfolio'	i. Talk for Learning Approaches on Child growth and development ii. (a) Role Play to demonstrate age level specialism in learning (b) Pyramid discussion to elucidate the concept of self-awareness. iii. Discussions on Portfolio template.
	8	The Basic School Science curriculum	i. Key features of the basic school science curriculum	i. Discussions on key features of the basic school science curriculum such as transitional and age-specific requirements ii. Checklist to monitor the Basic School Curriculum issues (e.g.content capability and overload, and whether activities are within the students' age limit).

Course Assessment	**Component 1**: Summative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Quizzes/Exams/ Poster/Presentations/ Report writing/ Core skills to be acquired: Cognitive, literacy, numeracy, writing and reading Weighting: 40% Assesses Learning Outcomes: CLO 1 and CLO 3
	Component 2: Formative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)* Practical Activities/ evidence of values learned/Group work/Evidence of equity and inclusivity/transferable skills during practical activities Core skills to be acquired: Honesty, carefulness, accuracy and tolerance, **Weighting:** 40% **Assesses Learning Outcomes:** CLO: 2
	Component 3: Formative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Peer Review / Evidence of report from school visits for portfolio Core skills to be acquired: Pedagogical, observational and cooperative skills **Weighting**: 20% **Assesses Learning Outcomes:** CLO 4, CLO 5, CLO 6, CLO 7, and CLO 8
Instructional Resources	Some resources that would be required to successfully enable an inclusive integrated science teaching would be Laboratory equipment, Chemicals, Periodic Table of Elements, Smartphones, Tablets, Laptops, Desktop computer, Productivity tools (software that allow teachers to work better), Subject based instructional tools/applications, Instructional laboratories, Smart boards, projectors, Smart screens, Open ERs – YouTube, Coursera, Khan Academy, iBox, and standard laboratories.
Required Text (Core)	Abbey, T. K., Alhassan, M. B., Ameyibor, K., Essiah, J. W., Fometu, E., & Wiredu, M.B. (2008). *Ghana association of science teachers integrated science for senior high schools*. Accra: Unimax MacMillan.
Additional Reading list	Abbey, T. K., &Essiah, J.W. (1995). *Ghana association of science teachers physics for senior high schools*. Accra: Unimax Macmillan. Ameyibor, K., & Wiredu, M. B. (2006). *Ghana association of science teachers chemistry for senior high schools*. Accra: Unimax MacMillan. Asabere-Ameyaw, A., & Oppong, E. K. (2013). *Integrated science for the basic school teacher I*. Winneba: IEDE. Oddoye, E. O. K., Taale, K. D., Ngman-Wara, E., Samlafo, V.,& Obeng-Ofori, D. (2011). *SWL integrated science for senior high schools: Students book*. Accra, Ghana; Sam-Woode Ltd. Zumdahl, S. S., & Zumdahl, S. A. (2009). *Chemistry*. Belmont, CA: Cengage Learning.

Social Studies /TVET

CONTEXT

The course on the *Intersection of Social Studies and Technical Vocational Education and Training (TVET)* draws on the commonalities in the focus of the two strands. Social Studies is set within the context of the growing multicultural setting in Ghana and seeks to clarify the value systems needed to improve on the development of right attitudes that a functional and good citizen must possess. TVET, on the other hand, focuses on the development of skills that enables the individual to contribute both to his/her personal wellbeing and the community. Both strands, therefore aspire to transform the individual through an education system that does not only emphasise on examination outcomes, but the development of individuals imbued with core values and competencies who can function in a modern technologically driven society that is inclusive.

The arrangement of this course will alternate with the **Physical Education** and **Music and Dance.**

Course Title	**Foundations of Social Studies and Technical Vocational Education and Training (TVET)**						
Course Code		**Course Level:**	**100**	**Credit value:**	**3**	**Semester**	**1**
Pre-requisite							
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminars** ☐	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	This course intends to present to student teachers the foundations of Social Studies and TVET. The course serves as an introduction to the underlying systems of both Social Studies and TVET. The essence of the course is to create awareness among students by tackling the key issues of identity and interconnections that define individual's identity and links to the community, occupations and skills, core values and competencies that enables the individual to become a functional and participatory citizen by using their skills to make contributions towards the development of their communities. The course will explain the different domains of TVET, address the misconceptions of TVET and help student teachers to become agents of change in sensitising learners to understand TVET as an important set of skills for entrepreneurship and community development. Student teachers will gain new insights into the interconnectedness of social development and TVET and be able to help learners disabuse their minds of the negative perceptions about TVET. Furthermore, the course will draw attention of student teachers to the need to engage all learners with a view to ensuring equity and inclusivity in the class and the role that individuals with diverse capacities can be engaged in society through work. Student teachers will be assisted to record their experiences in their reflective journals as part of the different artefacts						

	contained in their journals. The course will be delivered using a variety of pedagogical approaches including group discussions, think, pair share, field visits and role plays. The course provides for student teachers to visit school on work-based learning experience. Student teachers will at the end of the course use their knowledge and understanding of the importance of individual identity to assist learners to understand themselves and their potential in society; apply their understanding of the domains of TVET in helping learners to address some of their misconceptions about TVET; guide learners to appreciate the importance of different occupations in society and how they contribute to social development and record their experiences in their reflective journals as part of building their portfolios. The assessment of, for and as learning to measure the achievement of the learning outcomes will use methods such as quizzes, oral presentations, project works, and the evaluation of their recorded experiences as recorded in their journals in their portfolios. The course takes reference from NTS 1f; 1e; 1g; 2c; NTECF pgs. 16, 55	
	Outcomes **At the end of the course, Students teachers will be able to:**	**Indicators**
	CLO1. Demonstrate basic knowledge of the uniqueness and interrelatedness of the broad spectrum of TVET domains, and their contributions to national development (NTS 2c; NTECF pg. 55)	• Present Power-Point and charts on the uniqueness/interrelatedness of the four broad domains of TVET. • Explain the ways in which the different TVET domains contribute to national development
	CLO2. Demonstrate knowledge and understanding of misconceptions and stereotyping of TVET and how to address them NTS 2g; 3m; NTECF pg. 55).	• Discuss the contributions, misconceptions and stereotyping of TVET through gallery walk sessions. • Use internet resources (Open Educational Resources-OER) to present a written report on how to resolve misconceptions, biases and stereotyping about TVET
	CLO 3. Use theirknowledge and understanding of identity to show linkages that constitute the interconnectedness in communities (NTS 1f; 2c).	• Explain the concept of identity and the family structures in communities • Create a mind map of the connections that lead to how communities develop

	CLO 4. Apply their knowledge and understanding of core values and core competencies in 21st century learning to construct new ideas and thoughts on improving personal decision-making and attitude to life (1d; 1e; 2c).			• Explain and identify the similarities and differences between core values and core competencies of 21st century learning. • List some core values and explain their significance • Develop different scenarios showing how core competencies help in decision-making.
	CLO 5. Use the ideas from their understanding, knowledge and application of the course in teaching and learning to record their experiences into the Student Reflective Journals (SRJ) NTS 3h, NTECF pg. 45			• Present a write up of reflections from the course in journals • Share reflections on the application of the course in teaching and learning during school visits recorded in SRJ with colleagues.
Course Content	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes**
	1	***Identity and self-awareness***	• Understanding oneself (Who am I? - birth and growing up) • Family systems (Parents; nuclear and extended family systems) • Links to the Community (Individual, Social groups the school, religious group and others)	• **Shower Thoughts** to enable student-teachers discuss how discrimination and stigmatization can be reduced among learners of diverse cultural backgrounds • **Concept mapping** (Using graphic diagrams (e.g., depicting the family tree and types of family and demonstrate the connections between concepts and ideas, e.g., father, mother, children, members that make up the nuclear and extended families)
	2	***TVET domains (their distinctiveness/interrelatedness and misconceptions in TVET***	**Introduction to the 4 main domains of TVET** **Technical** • Wood Technology • Metal Technology • Automotive Technology • Construction Technology • Electronics Technology • Electrical Technology	• Use simulations and pre-video recordings from sources such as YouTube, Khan Academy, Coursera, Udemy, MOOCs to demonstrate and discuss the distinctiveness and inter-relatedness of TVET domains

			Visual Arts • Picture Making • Ceramics • Sculpture • Textiles • Graphic Design • Jewellery • Leatherwork • Bamboo and Rattan **Home Economics** • Food and Nutrition (Catering and Hospitality) • Clothing and Textiles (Fashion/Sewing) • Management in Living **Agriculture** • Crop Husbandry • Animal husbandry • Horticulture and Landscape Design • Agriculture Mechanization • Agribusiness • Fish Farming • **Forestry** **Misconceptions** • Females for Home Economics • Males for technical and	• Use resource person(s) (role models) who has defied limitations and stereotyping in TVET to discuss misconceptions/stereotyping and how to resolve them in TVET • Use resource person(s) (role models) who has defied limitations and stereotyping in TVET to discuss misconceptions/stereotyping and how to resolve them in TVET

			Agriculture programmes • TVET is perceived as a domain for non-academics • Little or no academic progression for TVET graduates • TVET is for the poor and less privileged • TVET is perceived as a dirty vocation • TVET is expensive, etc.	
	3	***Core values and competencies***	• What are core values • What are core competencies of 21st century learning • How core values and competencies help in shaping attitudes, choices and responses of individuals in enhancing community action and development.	**Value clarification approach** to enable student-teachers suggest ways to apply core values and competencies of 21st century learning.
	4	***TVET and Community Development***	**Contribution of TVET to national/community development:** **Social** • Poverty alleviation • Crime reduction • Social cohesion • Improved health of the citizenry • Facilitates the inclusion of the marginalized and the disadvantaged	• Use educational visits to industry (automotive workshops, metal/welding/wood workshops, construction sites, electrical/electronic workshops, studios, exhibitions, art galleries, museums, craft workshops, restaurants, farms, etc.) to observe, interact, take pictures (still/motion) and write reports on how gender and inclusivity manifest in the world of work in TVET • Use student teachers report on their educational visit to industry to discuss the contributions of TVET to national development

			Economic • Employment generation (self/wage) • Growth of Gross Domestic • Product (GDP) • Profitability and productivity • Facilitates sustainable and prevents environmental degradation • Food security **Technology** • Innovation in skills • Facilitates industrialization	• Use oral presentation of student teachers to discusscareer progression/career prospects in TVET • Produce a pictorial portfolio to illustrate the role of TVET in the local community
	5	***Building learning portfolios***	Writing reflections in Student Reflective Journals (SRJ) from school visits (applying techniques of the teaching about the domains of TVET and how to use core values and 21st century competencies in developing attitudes and making informed decisions.	• **Know-want to know and learnt**; (initiate discussion with student teachers about how to write in SRJs what they already know (e.g. What is SRJe.g., about the family as social unit and types of family), what they want to learn, and after the lesson indicate what they have learnt) • **Cooperative LearningTechniques (Learning Together Model)** In Learning Together, students-teachers are put into groups of four- or five-members to share experiences school visits concerning the application of the outcomes of the course.
Course Assessment: (Educative assessment of, for and as learning)	**Component 1: Examination** **Summary of Assessment Methods** Students teachers are assessed by summative examination on: • The ways in which the different TVET domains contribute to community and national development. • The concept of identity and the family structures in communities			

	• The ways in which the different TVET domains contribute to national development • The similarities and differences between core values and core competencies of 21st century learning. **Learning Outcomes assessed:** CLO 1; CLO3; CLO 4 **Weighting (40%)**
	Component 2: Coursework 1 Student teachers assessed through **Class Assignment** with **Oral Presentation** on the following: • Present Power-Point and charts on the uniqueness/interrelatedness of the four broad domains of TVET. • Use internet resources (Open Educational Resources-OER) to present a written report on how to resolve misconceptions, biases and stereotyping about TVET • Discuss the contributions, misconceptions and stereotyping of TVET through gallery walk sessions. • Develop different scenarios showing how core competencies help in decision-making. **Learning Outcomes assessed**: CLO1; CLO 2; CLO 4 **Weighting (40%)**
	Component 3: Coursework 2 Student teachers assessed through **Project Work** on**:** • Demonstration Plan for Learning on applying core values and core competencies of 21st century learning in the teaching of the TVET domains. **Learning Outcomes Assessed: CLO 5** **Weighting (20%)**
Instructional Resources	• Audio-visual Equipment and Video clips on interpersonal relationships and community layouts. • Pictures and posters of components of the community, community and school lay-outs and interpersonal relationships. • Brailler, Scanner and Embosser Sign language (Resource Person). • Internet facility, laptop computer/PCs
Required Text (Core)	• Tamakloe, E. K., Amedahe, F. K., & Atta, E. T. (2005). *Principles and methods of teaching* (2nd ed.). Accra: Black Mask. • Upham, A. A. (2018). *An introduction to agriculture.* New Delhi:F b &c Limited
Additional Reading List	• Anderson, M. L. & Taylor, H. F. (2004). *Sociology* (3rded.). Belmont: Wadsworth. • Awedoba, A. K. (2005). *Culture and development in Africa*. Accra: Historical Society of Ghana. • Banks, J. A. (1990). *Teaching strategies for the social studies: inquiry, valuing and decision-making*. New York: Longman.

Supported Teaching in School

CONTEXT

Supported teaching needs to consider planning, placement and classroom practice of the student-teacher. The following are some of the CONTEXT which impact on the effectiveness of placements:

1. **The Language policy issues** –some student-teachers have not been trained in the dominant L1 to be used as medium of instruction in their placement schools, especially in the upper primary level.
2. Student-teachers often **lack knowledge about cultural practices of some** of the **communities** where they are placed.
3. Student-teachers are not **adequately equipped to handle issues** on ICT integration, equity and inclusivity as well as differentiated learning.
4. Mentors do not usually teach for student-teachers to observe and emulate.
5. **Portfolio assessment, which provides evidence of student-teachers' practice is not included in their overall assessment** which focuses on exams.
6. Knowledge of **reflective practice and classroom enquiry** is not well developed among student-teachers, mentors, and tutors etc.
7. **Mentors, supervisors and lead mentors are inadequately prepared** to support student-teachers.
8. **Structured administrative links among the GES, Schools, University/College do not exist**.
9. **Residential accommodation in communities for students is not easy** to come by especially for female student-teachers.
10. **Poorly resourced partner schools** do not provide appropriate environment for practice.

In Year one, semester 1 CONTEXT are as follows:

1. Structured administrative links among the GES, Schools, University/College do not exist.
2. Student-teachers often lack knowledge about cultural practices of some of the communities where they are placed.
3. Knowledge of reflective practice and classroom enquiry is not well developed among student-teachers, mentors, and tutors etc.
4. Portfolio assessment, which provides evidence of student-teachers' practice is not included in their overall assessment which focuses on exams.
5. Poorly resourced partner schools do not provide appropriate environment for practice.

Course Title	**STS: Beginning Teaching (1)**						
Course Code		**Course Level:100**	**Credit value: 3**	**Semester 1**			
Pre-requisite	Pedagogic studies in Year 1						
Course Delivery Modes	**Face-to-face**	**Practical Activity**	**Work-Based Learning √**	**Seminars**	**Independent Study √**	**e-learning opportunities√**	**Practicum**
Course Description	STS: Beginning Teaching (1) is a practical school-based component of the teacher education programme designed to give student-teachers the opportunity to observe, plan, and work collaboratively with peers and mentors in schools to understand the approaches to teaching and learning of children with diverse socio-cultural and linguistic backgrounds. The main aim of the course is to expose student-teachers to school life and its environment and to enable them develop skills in observation and track progress of children's learning. Additionally, it is to help them acquire skills in purposeful reflection and keep a reflective journal to improve their practice. They will also begin to identify positive teacher-traits and professionalism in school Other components of the course include student-teachers' ability to develop and keep a personal professional portfolio and write a teaching philosophy statement. Further, the course is to enable student-teachers to analyse and understand key features of the basic education curriculum (NTS, 1f; 2b; & 3f). Assessment on the course will be by evaluation of the personal professional portfolio and its contents. The course duration is: • Six (6) weeks visit in **School 1** (one day per week in school to observe) o Semester 1 - 6 weeks						
Course Learning Outcomes	**OUTCOMES** **Upon completion of the course, student-teachers will be able to:**			**INDICATORS**			
	CLO 1. Demonstrate knowledge and skills of observation and reporting on class teaching and wider school activities **(in School 1**) (*College & School induction by tutors, school heads, lead mentors and mentors*)			• Produce well prepared induction schedule and procedures • Provide records of group work activities and /or cooperative learning for student-teachers during observations • Make oral presentations of knowledge gained during induction & observation by student-teachers in their groups. • Show records of specific observations from wider school environment and induction			

	CLO 2. Demonstrate skills of working collaboratively to support the learning of small groups of children, under the guidance of mentors, children's backgrounds/experiences whatever their socio-cultural and linguistic (NTS, 1e)			• Show records of collaborativework with others e.g. meet obligations and expectations of mentors, tutors, and peers • Show records of discussions on the learning of children they worked with identifying differences in their learning.
	CLO 3. Demonstrate knowledge and understanding of the key features of the basic school curriculum (BSC); and specifically focusing on core subjects and their associated expected learning outcomes (NTS, 2a).			• Report on small group discussions with mentors & peers on the key features of the official basic school curriculum. • List identified key features in the BSC
	CLO 4Demonstrate knowledge and skills in critical reflection on class teaching and wider school observations and record in student reflective journal (SRJ) (NTS, 1a)			• Use appropriate ICT tools to record teacher-pupils' classroom interactions and wider school activities in SRJs
	CLO 5. Demonstrate skills in preparing and writing a personal teaching philosophy statement (NTS, 1f)			• Provide a write-up of the beginning teacher's self-awareness, beliefs and values of teaching and learning (personal teaching philosophy)
	CLO 6. Demonstrate knowledge and skills in developing a professional portfolio with evidence from observations (NTS, 1a, e, & f)			• Use appropriate ICT tools (audio, braille, embossers) to compile artefacts & reports from observations and other achievements as contents in a professional portfolio and also showing creativity in design.
	CLO 7. Demonstrate skills in identifying traits of professionalism in school (NTS, 1d, 1f, 1g, & 2a)			• Provide SRJ recordings of demonstrated professional values and attitudes during engagements with people including pupils, mentors, tutors and peers.
Course Content	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and Learning Activities (strategies) to achieve learning outcomes:**
	1	**Induction** in **School 1**	Orientation by College tutor on STS	• Use audio visual(power point presentation, etc)/tactile analysis/video observation of past school orientations & YouTube videos as part of induction activities to sensitize student-teachers (NTS. 3j) • Observation of a class or simulation of a class with a checklist/taking field notes (braille and tactile; REF. SEN)

			Orientation to school culture, key education policies etc. by head of school, lead mentor, and mentor	• Mentors and student-teachers discuss items listed on orientation/induction schedule • Use audio visual/tactile analysis/Video observation of archival materials such as videos of past speech days, other school activities etc. followed by discussions as part of induction/sensitization
	2	**Observation**	Class teaching and learning Wider school life	• Observe class teaching and learning; teacher-pupils/pupil-pupil interactions • Observe and record good practices in whole class and small group teaching & learning • Observe and record peers carrying out collaboratively planned activities with their group or an individual, and how feedback is given on the learning • Observe and record wider school life: staff meetings, assemblies and pupils' play/lunch time activities, teaching and non-teaching staff attitudes and behaviours in school (NTS. 1e) (Use checklist of items to be observed and recorded, or Field notes recording strategies (ensure creativity in recordings)
	3	**Basic School Curriculum (BSC)**	Key elements of the BSC	• Engage student-teachers in group discussions with their mentors on BSC • Identify and compile list of key features of BSC (NTS. 2b)
	4	**Student Reflective Journal (SRJ)**	Template of a reflective journal with key items (pay attention to inclusion & diversity)	• Use small groups/individual discussions to analyse and evaluate sampled reflective journals which includes elements of inclusion and diversity. • Assist student-teacher to acquire and develop reflective practice skills • Use ICT tools and given template to develop a personal reflective journal (NTS 1a)

	5	**Personal Teaching philosophy statement**	Items in a teaching philosophy	• Analyse and evaluate sampled teaching philosophy statements of teachers working in pairs • List key elements in a teaching philosophy statement • Write a draft report of a personal teaching philosophy statement reflecting your own awareness of your transition from SHS to College (NTS. 1f)
	6	**Develop professional portfolio**	Template for a professional portfolio	• Analyse and evaluate contents in sampled professional portfolios using group work activities • Design an outline of a professional portfolio • Develop professional portfolio skills • Use ICT tools to collect and compile artefacts in personal professional portfolio (NTS. 2a)
	7	**Traits of professionalism in school**	Professionalism traits	• Discuss in groups positive behaviours, attitudes and values of both teaching and non-teaching staff in the school (NTS 1e, 1f)
	Note: All reports should consider braille and large font size prints (on request)			
Course Assessment (Educative assessment: of, for and as learning)	**Component 1: Professional Learning Portfolio (NTS, 1a,e, & f)** **Summary of Assessment Method:** Well organised, structured, reflective, representative, selective, and creatively presented. Contents include: Personal teaching philosophy, Photographs/other artefacts, SRJ, Reports from observations and induction etc. This is : assessment of learning and assessment as learning **Weighting: 60%** **Assesses Learning Outcomes:** Develop a professional portfolio with evidence from student-teacher's observations and other achievements (CLO, 1, 2, 3).			
	Component 2: Mentors/Lead mentors and Tutors evaluation of student-teacher behaviour (values & attitudes) in School (NTS, 1d, e, f, g) **Summary of Assessment Method:** Reports from mentors indicating student-teachers' punctuality, regularity, discipline, respect for authority, human relation skills (e.g. interaction with pupils & other teachers), participation in co-curricular activities, etc.; Tutors' feedback reports on student-teachers' presentations and any other assignments. This is : assessment of learning, assessment for learning, and assessment as learning			

	Weighting: 40 % **Assesses Learning Outcomes:** Identify traits of professionalism in school, Observation, Other tasks (CLO, 1, 2, 3 & 5).
Instructional Resources	• Videos/audio visual (i.e laptop, projector, desktop etc.)/tactile analysis of mentoring and coaching • Videos/audio visual/tactile of Classroom teaching & learning • Samples of classroom observation checklists (braille and written large font size) • Samples of professional teaching portfolios • Samples of reflective journals/log Teaching Practice Handbooks from Universities and Colleges of Education • T-TEL materials from www.t-tel.org • TESSA materials from www.tessafrica.org
Required Text (Core)	Cohen, L.; Manion, L. Morrison, K., & Wyse, D. (2010). *A guide to teaching practice* (5th ed.) New York: Routledge. Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). *Pedagogy, curriculum, teaching practices and teacher education in developing countries: Education rigorous literature review*. Department for International Development.
Additional Reading List	Conn, K. (2014). *Identifying effective education interventions in Sub-Saharan Africa: A meta-analysis of rigorous impact evaluations* (Doctoral dissertation, Columbia University). Lane, K. L., Carter, E. W., Common, C., and Jordan, A. (2012), Teacher expectations for student performance: Lessons learned and implications for research and practice, In Bryan G. Cook, Melody Tankersley, Timothy J. Landrum (Eds.) *Classroom behavior, contexts, and interventions* (Advances in Learning and Behavioral Disabilities, Volume 25) Emerald Group Publishing Limited, pp. 95-129. Ormrod, J.E. (2014). *Educational psychology: Developing learners.* Pearson: Boston. Vavrus, F., & Bartlett, L. (2013). Testing and teaching. In F. Vavrus & L. Bartlett (Eds.), *Teaching in tension: International pedagogies, national policies, and teachers' practices in Tanzania (pp. 93-114).* Rotterdam: Sense.

Year 1 Semester 2

Pedagogic Knowledge with ICT & Inclusion: SEN/Gender

CONTEXT

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Some basic school teachers tend to use the same instructional strategies for learners without recourse to diverse learner characteristics, abilities and developmental stages. This is due to the fact that the existing Diploma in Basic Education Curriculum (DBE) provides general knowledge about child development. Teachers therefore need to be equipped with the knowledge and skills in identifying the diverse learning characteristics of learners from early grade to early adolescence. Additionally, teachers' assessment need to be differentiated to meet the diverse needs of all learners.

Course Title	**Social, Cultural and Psychological Basis of Learning**					
Course Code		**Course Level: 100**		**Credit value: 3**		**Semester 2**
Pre-requisite	**Student teachers have knowledge in foundations of education in Ghana and inclusive school-based inquiry**					
Course Delivery Modes	**Face-to-face: [√]**	**Practical activity: [ ]**	**Work-Based Learning: [ ]**	**Seminars: [√]**	**Independent Study: [√]**	**e-learning opportunities: [ ]**	**Practicum: [ ]**
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	This is an introductory course exposing student teachers to the nature, stages and basic principles of human development and learning. Student teachers would be introduced to basic concepts in human growth, development and maturation and threats as well as the causes of abnormality Additionally, student teachers will be exposed to basic knowledge about the domains of development, learning styles and motivational techniques that respects the diversity of all learners. In the delivery of the course, differentiated interactive and assessment techniques will be employed to help student teachers examine the educational implications of the domains of development and the varying learning styles. This course will thus make student teachers aware of the need for differentiated instruction **(NTECF, NTS 3f, 3g).**					

Course Learning Outcomes	On successful completion of the course, student teachers will be able to:	Indicators
	CLO 1. Demonstrate knowledge and understanding of the concepts of human growth, development and maturation and the causes of abnormality **(NTECF, NTS 3f, 3g).**	• Explain the difference between human growth, development and maturation • Discuss the educational implications of the principles of human growth and development. • Discuss the causes of abnormality
	CLO 2. Demonstrate knowledge and understanding of the course of human growth and development and how to determine the sex of a developing foetus.	• Describe the pre-natal, perinatal and the post natal phases of human development. • Explain how the sex of a developing foetus is determined. • Discuss the educational implications of the course of human growth and development.
	CLO 3. Demonstrate basic knowledge and understanding of the domains of development (NTS 3g, 3f).	• Explain cognitive development of learners from age Upper Primary to early adolescence • Describe socio-emotional cognitive development of learners from Upper Primary to early adolescence • Discuss physical development of learners from age Upper Primary to early adolescence
	CLO 4. Demonstrate knowledge and understanding of threats to human growth and development and their educational implications **(NTS 2f, p.17, 3c, 3g, p. 14)**.	• Explain clearly the various biological threats to human growth and development and the educational implications. • Examine the various environmental threats to human growth and development and their educational implications.
	CLO 5. Demonstrate understanding and application of learning styles and various strategies for learning	• Identify the various learning styles and clearly explain how it relates to them. • Examine the various learning strategies for each learning style.

	CLO 6. Demonstrate effective ways of motivating learners in inclusive and multi-grade learning environments **(NTECF, NTS 3d, p.14).**		• Use appropriate techniques such as positive reinforcement and shaping to modify behaviour of diverse learners in inclusive classrooms. • Apply democratic principles in teaching and learning sessions to highlight the values of fairness and justice to enhance collaborative learning.	
	Units	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes:**
Course Content: Psychology of human development and learning	**1**	Basic concepts of psychology of human development and abnormality	Growth, development, maturation and abnormality; Principles of growth, development, abnormality and educational implications	Animation and simulations of human development from conception and abnormality from YouTube and other online resources. Diamond nine and pyramid techniques to discuss the basic concepts. Audio-visual and tactile analysis of human fertilisation
	2	The course of human growth and development	Conception, prenatal, perinatal, post-natal; Mechanisms of sex determination	Audio-visual and tactile analysis of prenatal, perinatal and post natal development; show animations and diagrams on sex determination and follow-up with Panel/pyramid discussion on the education implications the course of human development.
	3	Domains of humans development	Basic characteristics of cognitive, socio-emotional and physical development from Upper Primary to early adolescence	Audio-visual and tactile analysis of development across the domains; show animations and follow-up with Panel/pyramid discussion on the basic characteristics of cognitive, socio-emotional and physical development from Upper Primary to early adolescence and education implications.
	4	Threats to human growth and development and causes of abnormality	Biological threats to growth and development; environmental threats to growth and development; causes of abnormality	Audio-visual, tactile analysis and animations of biological and environmental threats of human development and abnormality; Role play the effects of the threats on learning

	5	Learning and learning styles	The concepts of learning, learning styles; strategies for learning styles	Using concept mapping and cartooning for illustrating and discussing the learning styles and their strategies.
	5	Motivation	The concept motivation; types of motivation and the need for motivation in the classroom	Role play and dramatization of various scenarios of behaviour; analysis of cases and reflective notes on different classroom scenarios on motivation
Course Assessment (Educative assessment: of, for and as learning)	**Component 1**: Formative assessment (individual and group presentation) Summary of Assessment Method: i. mixed ability group presentation on threats to development; causes of abnormality and motivation; ii. Individual presentation on the learning styles and strategies (core skills to be developed: respect for diversity, critical thinking, digital literacy, collaboration and communicative skills, personal development) Weighting: 30% Assesses Learning Outcomes: CLO 4, 5 and 6 (units 4, 5, & 5)			
Component 2: Formative assessment (Quiz) Summary of Assessment Method: Quiz on differences in growth, maturation, development and abnormality (core skills to be developed: critical thinking, personal development) Weighting: 30% Assesses Learning Outcomes: CLO 1 and 2 (unit 1 and 2)				
Component 3: Summative assessment Summary of Assessment Method: End of semester examination on units 1 to 4 (core skills to be developed: critical thinking, personal development) Weighting: 40% Assesses Learning Outcomes: CLO 2, 3 and 4				
1. Audio-visuals and animations from YouTube 2. Projectors and computers **3.** Solid and cross section models of the brain				
Required Text (Core)	Ammah, C. (2016). *Developmental psychology for educators*. Accra : Janlex Ventures. Feldman, R. S. (2008). *Understanding psychology* (8th ed.). New York: McGraw-Hill. Ormrod, J. E. (2014). *Essentials of educational psychology* (4th ed.). New Jersey: Pearson. Owusu-Banahene, N. O. (2007*). Educational psychology: The science of learning* (2nded.). Kumasi: Narco Printers.			

Additional Reading List	Berlinder, D. C. & Calfee, R. C. (Eds.) (2006). *Handbook of educational psychology*. New York: Macmillan, Brown and Benchmark. Berk, L. E. (2012). *Infants and children: Prenatal through middle childhood* (7th ed.). Toronto: Allyn & Bacon. Bronfenbrenner, U. (2009). *The ecology of human development: Experiments by nature and design*. Cambridge, Massachusetts: Harvard University Press. Dacey, J. S., Travers, J. F., & Fiore, L. (2008). *Human development: Across the lifespan* (7th ed.). Boston: McGraw-Hill. Giccarelli, S. K., & White, J. N. (2009). *Psychology*. New Jersey: Pearson Education, Inc. OppongFrimpong, S., &Amissah, P. A. K. (2009). *Psychology of adolescence*. Accra: Emmpong Press. Zanden, V. J. W. (1993). *Human development*. (5th ed.). McGraw-Hill: USA.

CONTEXT

Information and Communications Technology (ICT) which is all pervasive in our daily lives, has applications and implications for most endeavours of human kind including education. ICT encompasses a convergence of information and telecommunications tools, technologies and activities used for collecting, processing, storing, sharing and communicating meaningful data. Despite the high mobile communication device ownership, integration of ICT into teaching and learning is low in Ghanaian schools. Ghanaian schools can be categorised as low technology-rich learning environment particularly in the public schools.

The following challenges effective teaching and account for this low integration of ICT in teaching and learning:

1. There is an intra-national digital divide (Rich/Poor, Male/Female, Urban/Rural, SEN/Typical, endowed communities/deprived communities)
2. Low capacity for Effective ICT teaching and Integration
3. Inadequate institutional support; in terms of technical, use, policy, motivation, materials provision and capacity building
4. The lack of authentic (real world) assessment.
5. Negative perceptions of ICT affect its incorporation into education

Course Title	**Introduction to Information and Communications Technology**						
Course Code		**Level: 100**		**Credit value: 3**		**Semester: 2**	
Pre-requisite	**None**						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☐	**Seminars** ☒	**Independent Study** ☒	**e-Learning opportunities** ☒	**Practicum** ☐
Course Description (indicate NTS, NTECF, BSC GLE to be addressed)	This course is designed to introduce student teachers to computer-based information systems and their applications, implications and issues surrounding their use. It provides student teachers with background information in the use of computers and serves to meet their general technology/computer literacy requirement**.** The course provides practical skills in various ways to incorporate technology into the student teacher's personal educational programme as well as integrating word processing, spreadsheets, presentation software, Internet Applications and Services in teaching and learning**.** The course will also explore past and present developments in the field of ICT. Ethical, health and safety, privacy, security and intellectual property issues will be discussed. The case of inclusivity and equity and other social issues within the context of Ghanaian core values including honesty, creativity and informed citizenry and lifelong learning that inform professional practicewill also be discussed. **(*National Teachers' Standard: 1a, 1b, 2c, 2e, 3a, 3b, 3c, 3d, 3e, 3h, 3i., 3k, 3n, 3p/NTECF: Pillar 1, 2 & 3, crosscutting issues; Assessment, Core skills, Professional values and attitudes)*.**						

Course Learning Outcomes	**Outcomes** On successful completion of the course, Student Teachers will be able to:	**Indicators** The following will be used to measure the achievement of the corresponding learning outcomes:
	1. Demonstrate knowledge and understanding of the basic concepts of ICT and their impact on society, education and national development. ***NTS: 1a, 1b, 2c, 2e/NTECF: Pillar 1***	• explain some basic concepts of ICT including: Computer, information, integration literacies, hardware, software, affordances of ICT tools • analyse and evaluate the changes brought by the introduction of ICTs: identify practical applications of ICT in society
	2. Demonstrate basic ICT operations using ICT productivity tools. ***NTS: 1a, 1b, 2c, 2e, 3a/NTECF: Pillar 1&3***	• perform basic tasks using an operating system e.g. create a folder • create, edit, format, save and print documents using various productivity tools • use the internet to search for information to support projects
	3. Demonstrate their own professional ICT needs in terms of professional knowledge, practice, values and attitudes ***NTS: 1a, 1b, 3b, 3c, 3e, 3d, 3n /NTECF: Pillar 2 & 3***	• explain ethical, intellectual property, privacy, security, social, inclusivity and equity health and safety issues relating to the use of ICT • highlight the professional implication and applications of the above issues in a portfolio (3.1)

Course Content	Units	Topics:	Sub-topics (if any):	Teaching Learning Activities
	Unit 1	The Information Society	1.1 The advent of the Information Society 1.2 The role of the computer as the transforming agent in the information society 1.3 Requisite skills for the Information Society	Seminars (Talk for Learning) & interactive discussions (See creative approaches below) to critically examine the advent of the information society, the role of ICT on society, the requite skills for the information society, interactive multimedia presentations, video analysis (e.g. From YouTube) to evaluate the use of ICTs in educational institutions. These strategies must respond to inclusivity and equity (should aim at expanding learning for diverse learners e.g. People with visual impairment, dyslexia, dysgraphia). Identify the instances when personal, cultural, and institutionalized discrimination are creating and/ or sustaining barriers to learning for some student-teachers.
				Using Creative Approaches (such as, games, storytelling, role paly, songs and modelling) to stimulate and involve students when they interact with other students or to teach.

	Unit 2	The promises of ICT	2.1 Potential benefits using ICT in Education and National development	Inquiry-based learning (Questioning), seminars (Talk for Learning) interactive discussions, interactive multimedia presentations to examine the affordances and effects of ICTs in Education, field trips to observe the how ICTs are transforming education and industry, tutorial and practical sessions, video analysis e.g. YouTube to discuss the impact of ICT in education. These strategies must respond to inclusivity and equity (i.e. ICT as a tool for expanding learning to diverse learners e.g. People with visual impairment, dyslexia, dysgraphia)
	Unit 3	The Conceptual Computer	3.1 Hardware 3.1.1 Input Units 3.1.2 Output Units 3.1.3 Central Processing Unit 3.1.4 Secondary Storage 3.2 Software (*will be covered extensively in practical session)* 3.2.1 The Systems Software – Language Translators, Operating Systems, Device Drivers, Utility Programs (LODU) 3.2.2 Application Software – Educational, Business (Word processors, spreadsheets, etc.)	Project- and problem- Based (Group Work), and inquiry-based learning (Questioning) to Illustrate the basic block diagram of the computer system, seminars (Talk for Learning), interactive discussions , interactive multimedia presentations and practical sessions, video analysis e.g. YouTube to discuss the characteristics of the conceptual computer. These strategies must respond to inclusivity and equity (i.e. ICT as a tool for expanding learning to diverse learners e.g. People with visual impairment, dyslexia, dysgraphia). student teachers to create a wiki of observation of school visit

			3.3 Computer Networks and the Internet 3.3.1 Computer Networks 3.3.2 Networking management tools 3.3.3 Background of the Internet 3.3.4 Getting Connected – ISP's 3.3.5 World Wide Web 3.3.6 Web Browsing and Searching Resource 3.3.7 Using the internet: E-mail, File Transfers/Downloading	learning (Questioning), seminars (Talk for Learning) interactive discussions , interactive multimedia presentations, tutorial and practical sessions, video analysis e.g. YouTube to identify and discuss and practice information literacy techniques. These strategies must respond to inclusivity and equity. (Self-awareness, about their biases, beliefs and practices, styles of learning, interests, etc) Student-teachers to create a wiki on the issues to relating to ICT use
	Unit 4	Information Literacy	4.1 Locating and using information from different sources 4.1.1 Information retrieval tools (abstracts, indexes, etc) 4.1.2 Electronic resources/ TESSA OER (online databases, internet, MOOCS, CD-ROM, etc) 4.1.3 Reference sources (almanacs, encyclopaedia, dictionaries, etc.) 4.2 Issues relating to ICT use 4.2.1 Ethics (normative ethics, perspectives etc)	Project- and problem- Based (Group Work) to apply information skills, and inquiry-based

			4.2.2 Intellectual property issues (Copyrights, patent etc.) 4.2.3 Privacy & Security (fraud, computer crime) 4.2.4 Health and Safety 4.2.5 Inclusivity & equity 4.2.6 Plagiarism & Referencing/Citation	
	Unit 5	Basics of Operating systems	5.1 Menus, windows, icons and dialog boxes, etc. 5.2 Files and folders (File system, Drives, folder and file attributes) 5.3 Tools: Explorer, Print menu, Accessories. Help facility (Help menu), Control panel menu,	Skills will be developed mainly through series of practical sessions to create educational artefacts like e-portfolios. Seminars (Talk for Learning), and interactive multimedia presentations to discuss project artefacts. Watching videos e.g. from YouTube to deepen understanding of the basics of operating systems. These strategies must respond to inclusivity and equity (i.e. ICT as a tool for expanding learning to diverse learners e.g. People with visual impairment, dyslexia, dysgraphia).

	Unit 6	Word processors	6.1 Introduction to word-processing software 6.2 Word process menus, Home, Page Layout, Insert, References, Mailings, Review, View 6.3 Home: Font, Font size, Bullets, Numbering, Justification, etc. 6.4 Insert: Tables, Illustrations, Links, header & Footer, Text, Symbols 6.5 Page Layout: Themes, Page Setup, Page Background, Paragraph, Arrange 6.6 References: Table of Content, Footnotes, Citations and Bibliography, Captions 6.7 Mailings: mail Merge, Write & Insert fields, Preview results, Finish 6.8 Review: Proofing, Comments, Tracking, Changes, etc. 6.9 View: Document views, Show/hide, Zoom, Window	Skills will be developed mainly through series of practical exercises taught through project- and problem- based learning approaches and practical sessions (Individual and Group Work) to create educational artefacts like reports/lesson notes, newsletter, timetable. Interactive multimedia presentations, video analysis e.g. YouTube to discuss the concepts and techniques for using word processors. These strategies must respond to inclusivity and equity (i.e. ICT as a tool for expanding learning to diverse learners e.g. People with visual impairment, dyslexia, dysgraphia). student teachers to create a wiki on the use of word-processing software in education

		Presentation software	1.1 Introduction to presentation software (Uses and advantages of using Presentation Software) 1.2 Presentation Software Menus, Home, Page Layout, Formulas, Data, Review, View Home: Font, Font size, Bullets, Numbering, Justification, etc. 1.3 Insert: Tables, Images, Charts, Links, Text, etc. 1.4 Draw: use various word-processing tools 1.5 Design: Slide design, slide size, format background, etc. 1.6 Transition: Slide transition, sounds, slide advance, etc. 1.7 Animation: Animation (entrance emphasis exit) Timing, etc. 1.8 View: presentation views Slide master, handout master, notes master, etc.	Skills will be developed mainly through series of practical exercises taught through project- and problem- based learning approaches and practical sessions (Individual and Group Work) to create educational artefacts like sample lesson, presentation of school visit. Interactive multimedia presentations, video analysis e.g. YouTube discuss the concepts and techniques for using presentation software. These strategies must respond to inclusivity and equity (i.e. ICT as a tool for expanding learning to diverse learners e.g. People with visual impairment, dyslexia, dysgraphia). student teachers to create a wiki on the use of Presentation software in education

		Spreadsheets	8.1 Introduction to spreadsheets (Uses and advantages of using spreadsheets) 8.2 Spreadsheet Menus, Home, Page Layout, Formulas, Data, Review, View 8.3 Home: Font, Font size, Alignment, Number, Style, Cells, Editing, etc. 8.4 Insert: Tables, Illustrations, Charts, Links, Text 8.5 Page Layout: Themes, Page Setup, Scale to fit, Sheet Options, Arrange 8.6 Formulas: Function Library, Define Names, Formula Editing, Calculation 8.7 Data: Connections, Sort & Filter, Data tools, Outline 8.8 Review: Proofing, Comments, Changes, etc. 8.9 View: Workbook view, Show/hide, Zoom, Window	Skills will be developed mainly through series of practical exercises taught through project- and problem- based learning approaches and practical sessions (Individual and Group Work) to create educational artefacts like gradebook, budgeting for educational materials/field trip. Interactive multimedia presentations, video analysis e.g. YouTube discuss the concepts and techniques for using spreadsheet software. These strategies must respond to inclusivity and equity (i.e. ICT as a tool for expanding learning to diverse learners e.g. People with visual impairment, dyslexia, dysgraphia). student teachers to create a wiki on the use of spreadsheet software in education

Course Assessment	**Component 1:** Written **Summary of Assessment Method:** **The various assessment options to choose from for component 1;** i. Written tests/quizzes and class exercises to examine their knowledge of ICT concepts. E.g. explain some basic concepts of ICT including: Computer, information, integration literacies, hardware, software, Affordances of ICT & issues relating to the use of ICT tools ii. Written assignments, group work to analyse and evaluate the changes brought about by ICT. E.g. Analyse and evaluate the changes brought by the introduction of ICTs iii. Written reports on observation, Video Analysis, individual and group project synthesize and evaluate the use of ICTs in various educational settings. **Weighting: 40 %** **Assesses Learning Outcomes: CLO1**
	Component 2: Practical **Summary of Assessment Method:** i. Project-/problem-/inquiry-based assessment: Identify, investigate, propose and create solutions using the ICT tools they (student Teachers) have been introduced to. E.g. creation of timetables, sample lesson, newsletters etc. **Weighting: 40%** **Assesses Learning Outcomes: CLO 2 & CLO 3**
	Component 3: Portfolio Assessment **Summary of Assessment Method:** i. Create e-portfolios to contain a. Artefacts from practical work and b. Reports of observation of schools visit etc. **Weighting: 20%** **Assesses Learning Outcomes: CLO 2 & CLO 3**
Instructional resources	i. Smartphones ii. Laptops iii. Desktop computers iv. Tablets

	v. TV and Radio vi. Open Educational Resources (Including: YouTube, MOOCS-Udemy/coursera, khan academy, TESSA) vii. The iBox (CENDLOS) viii. Productivity tools ix. Subject based application software x. Instructional Laboratories (with multimedia equipment and smartboards) xi. maintenance and repair workshops
Required Text (Core)	Hunt, M., & Clemens, B. (2017). *Illustrated microsoft office 365 & office 2016: Fundamentals* (7th ed.). Boston, MA: Integrating Technology and Digital Media in the Classroom. O' Leary, T. J., & O' Leary L. I. (2017). *Computing essentials (26th ed.)*. New York: McGraw Hill. Wempen, F. (2014). *Computing Fundamentals: Introduction to computers.* New York: Wiley.
Additional Reading List	Microsoft Encarta (2018). 1993-2005 Microsoft Corporation. Shelly, G. B., Vermaat, M. E. (2011). *Discovering computers 2012: Living in a digital world, Complete International Edition*. Boston, MA: Thompson Course Technology. Shelly, R., Cashman, T.J., Gunter, G.A., and Gunter, R.E. (2013). Teachers Discovering Computers. Thomson Course Technology. Selected articles and online resources (youtube.com, MOOCs: Khan Academy, TESSA [www.tessafrica.net], Udemy etc)

Language and Literacy

CONTEXT

Effective communication by teachers is crucial for effective communication with their learners and stakeholders. It is also crucial in their academic endeavour. However this key component is de-emphasised in the current teacher training curriculum. This has affected student teachers ability to communicate effectively in their academic work and with their learners in the classroom. There is the misconception that once student teachers take courses in English their communication skills will improve but this is not always the case. This course is therefore aimed at training student teachers to possess good communication skills and to apply them in their academic work and in their classroom as teachers.

Course Title	**Communication Skills**						
Course Code		**Course Level: 100**	**Credit value: 3**		**Semester 2**		
Pre-requisite	Introduction to language and literacy studies						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activities** ☒	**Work-Based Learning** ☐	**Seminars** ☒	**Independent Study** ☒	**E-Learning Opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF, to be addressed)	This is an introductory course for all new student teachers. It is designed to help students to develop effective language and study skills for their academic work; improve their vocabulary, become familiar with the conventions of standard English Language usage, and develop strategies for preparing for, and taking examinations. The course also aims at equipping student teachers with the mechanical skills for academic writing and reading. Additionally, the course will enhance trainee teachers' skills for communicating effectively in an academic environment and classroom context. The course will offer students the opportunity to visit schools to acquaint themselves with how teachers communicate with their learners and the challenges they face using the requisite skill to manage their time effectively and plan for their studies. Furthermore, the course will offer student teachers the opportunity to apply appropriate technology to use and access information to improve their communicative competence. The course will be delivered through learner-centred teaching strategies like discussions, self-study, observations, videos/audio-visual, group/individual work, etc. Such approaches will be employed taking into consideration all manner of learners. Student teachers who take the course will be assessed through quizzes, examinations, report writing, assignments, group work, school visits/observation and class participation. The course seeks to fulfil the following NTS and NTECF requirements: NTS 1a, b; 2e, and 3 b, e, i, j, and NTECF bullets 5. 9; p.25)						

Course Learning Outcomes	On successful completion of the course, student teachers will be able to:	
	Learning outcomes	**Indicators**
	1. Demonstrate knowledge and understanding of the nature of academic communication (reading and writing. (NTECF bullet 9, p.25)	• Explain the process and forms of communication. • Discuss barriers to communication in academic writing and find solutions to them. • Exhibit effective academic writing skills using discipline specific language.
	2. Demonstrate knowledge and understanding of study skills and apply them in their studies. (NTS 1b)	• Take and make brief but comprehensive notes from lessons taught or materials read. • Use the internet to gather information on topics discussed in class for studies. • Identify and pick out salient information from books, articles, lessons and online materials. • Make a daily routine chart to manage daily academic life • Develop appropriate strategies to prepare for lectures and examinations
	3. Develop critical and analytic thinking skills in reading and apply them to improve their communication in the academic environment. (NTS 3e)	• Use appropriate reading strategies and types for targeted purposes. • Exhibit enhanced critical and analyticalreading abilities in their academic communication.
	4. Develop good academic writing skills and be able to transfer such skills to learners. (NTS 3i)	• Write good academic essays in subject specific disciplines • Transfer acquired writing skills to learners
	5. Demonstrate knowledge and skills in citing and making reference to academic documents and apply them in their writing by use of appropriate technology (e.g. computer applications (NTS 3b, j and NTECF bullet 8, p. 25)	• Make in-text citation and references to sources of materials used in writing academic essays/term papers and projects/reports • Use appropriate technology as tool to write references.
	6. Reflect on how communication is practised in the basic education classroom between teachers and	• Observe how communication is practiced in the classroom teaching and learning process

	learners and among learners. NTS 1a			• Identify the practical challenges of communication in the classroom, especially in a multilingual setting. • Write report on observation of communication practice in partner schools.
	7. Communicate effectively to reach all manner of learners in the classroom and other stakeholders (NTS 2e and NTECF bullet 5, p. 25)			• Exhibit effective and appropriate communicate skills that take into consideration all manner of learners • Communicate effectively with stakeholders (e.g. parents/guardians/school management)
	8. Use appropriate technology to access information and document sources (NTS 3b, NTECF bullet 8, p. 25)			• Use appropriate technology to search for information • Use appropriate referencing styles in their academic writings.
Course Content	**Units**	**Topics**	**Sub-topics (if any)**	**Teaching and Learning activities to achieve learning outcomes**
	1	Academic Discourse	1.1 Nature of academic communication 1.1.1 What is communication (review) 1.1.2. Forms of Communication in an academic environment 1.1.3. Barriers to effective Communication in academic writing 1.1.4. Overcoming the barriers to effective communication in academic writing	• Discussion (Tutor introduces the topic and leads class in discussion on the concept and forms of communication) • Graphic organiser/concept mapping (students teachers make a concept map of the barriers to effective communication). • Brainstorming and class presentation (student teachers are put in groups to brainstorm on how to overcome the barriers of communication and make class presentation) • Checklist (student teachers complete checklist to see if lesson objectives are met).

	2	Developing Reading skills	2. 1 Types of reading 2.1.1. Intensive reading 2.1.2. Extensive reading 2.1.3. Skimming 2.1.4. Scanning 2.2. Developing critical and analytic reading 2.2.1. Monitoring reading 2.2.2. Metacognition 2.2.3. Graphic and semantic organisers 2.2.4. Critical reading for information 2.2.5. Generating questions	• Group work (student teachers work in groups and brainstorm and look for information on a types of reading and how they promote academic communication) • Practical work (students teachers are given reading texts to practice the various reading types) • Discussion (teacher leads class discussion on how to develop critical and analytic reading skills) • In addition to this, tutors should use any appropriate learner-centred approach that takes into consideration all diverse learners and ensure that students are involved in the learning process.
	3	Developing Study Skills	3.1 Study skills 3.1.1. Note-taking and note making	• Discussion (Teacher lead discussion using leading and probing questions taking into consideration all manner of learners) • Oral tapes/videos (Student teachers listen to oral tapes/videos and take notes of the main ideas presented) • Group work (students are put into mixed groups to use appropriate technology to gather specific information and present to class bringing out main ideas in material read) • Graphic organiser/concept mapping (students use appropriate technology to design graphic organisers/concept map to plan their time for their individual daily and weekly activities/routines

			3.2. Gathering relevant materials and studying for information 3.3. Time management 3.4. Examination preparation skills	• Observation (students visit schools to see how timetables are designed for studies and write reports on it. • Self-study (students teachers reflect on how they plan for examinations and share with class)
	4	Academic Writing	4.1. Types of writing 4.1.1. Types of writing (Argumentative, Cause and effect, Compare and contrast, Evaluative, Descriptive, Narrative, and Summary 4.2. The Writing Process 4.2.1. Prewriting (planning/finding information). 4.2.2. Writing (drafting, Revising and Editing). 4.2.3. Final product 4.3. Developing critical writing	• Research and presentation (students discuss the various types of writing in academic setting assigned to them and make presentation to class) • Video (teacher shows a video of a teacher presenting the processes involved in academic writing to students and leads them to identify the steps involved in process writing) • Practical Work (students are made to select topic and write essays following the steps involved in process approach to writing) • Self-study (Individual students research on components of critical writing and write essays and submit for peer/teacher evaluation) • Practical activity (students are presented with texts and asked to paraphrase and summarise them) • Discussion (teacher leads class discussion on grammar, how it affects effective writing and how learners can minimise grammatical and punctuation errors in their academic writing)

			4.3.1. Developing arguments 4.3.2. Being critical 4.3.3. Summarising and paraphrasing 4.3.4. Planning and formatting 4.3.5. Structuring and sequencing 4.4. Grammar and writing 4.4.1. Basic sentence structure and types 4.4.2. Common grammatical errors 4.4.3. Paragraph development 4.4.4. Punctuation	• Demonstration (students demonstrate by writing good paragraphs employing all skills learned in paragraph writing and present to a colleague for review) • Problem solving (students identify and resolve grammatical errors in a given texts) • Project (students work on individual topics -mini projects - and submit them for evaluation by tutor)
	5	Documenting (Referencing) Sources	5.1 In-text citations and Referencing 5.1.1. Referencing, in-text citation, bibliography, Footnotes/endnotes MLA, APA, etc. 5.2. Research ethics (e.g. plagiarism) and Intellectual property issues	• Lecture and discussion (teacher introduces the topic on documenting sources and use leading and probing question to lead students to discuss the topic). Student teachers are introduced to term papers/thesis/project writing templates on the computer) • Group work (students work in assigned groups to work on different topics e.g. ethical issues in research, plagiarism etc. and make presentation to class) • Research and Presentation (students search for information online and books on how to reference different forms of materials used in writing academic papers) • Practical work (students write academic essays which require in-text citation and referencing)

Course Assessment	**Component 1**: COURSEWORK - Summary of Assessment Method: Assessment of learning (1 diagnostic quiz) on process and forms of communication, barriers to effective communication, developing critical reading and writing skills, and referencing *(Core skills addressed include communication, creativity, teamwork/collaboration, inclusivity, observation and inquiry skills, digital literacy)* Weighting: 40% Assesses Learning Outcomes: Course Learning outcomes measured 1, 2, 3, 4, 5, and 8
	Component 2: COURSEWORK Summary of Assessment Method: Assessment for and as learning (1 Group presentationand class participation*(core skills targeted are inclusivity, communication, critical thinking, observation and inquiry skills, digital literacy, team work)* **Weighting:** 30 % **Assesses Learning Outcomes:** Course learning outcomes measured 6, 7, and 8 **Component 3**: COURSEWORK Summary of Assessment Method: 1 observation and report writing on school visits Weighting: 30% (core skills targeted are *(core skills targeted are inclusivity, communication, critical thinking, observation and inquiry skills, digital* literacy, team work) **Assesses Learning Outcomes:** Learning Outcomes to be measured 6 and 8
	On-line material - http:networketiquette.net Computers, laptop, sample academic writings Language lab
Instructional Resources	• Smartphones • Laptops • Desktop computers • Tablets • TV and Radio • Open Educational Resources (Including: YouTube, MOOCS-Udemy/coursera, khan academy, TESSA) • The iBox (CENDLOS)
Required Text (Core)	APA (2010). *A guide to APA referencing (6th edition).* Washington, DC: American Psychological Association. Ajmani, J. C. (2012). *Good English: Getting it right.* New Delhi: Rupa Publications.
Additional Reading List	Gleason, J. B. (Ed.).*The development of language (6th ed.).*Needham Heights, MA: Pearson. Hasson, G. (2012). *Brilliant communication skills: What the best communicators know, do and say.*Upper Saddle River, New Jersey: Pearson Education.

Mathematics /Numeracy

CONTEXT

National and international assessments results consistently indicate that a few (< 25%) of our basic school pupils possess the mathematical proficiency needed to access the opportunities that the 21st century offers them. The low performance is largely as a result of an education system that appears to direct focused attention on preparing students for passing examinations, at the expense of helping them to develop the requisite knowledge, skills and values they will need to participate fully in society.. Teachers often tend to present mathematical concepts, work several examples on the chalkboard, and then assign exercises in which pupils practise whatever has just been presented; an approach that has been widely criticised. The learning experiences, thus, appear to ignore the varied uses of mathematics in different local contexts to amplify the beauty of mathematics in solving real-life problems nor do they take account of learners' differing language and literacy abilities, accessibility and inclusivity issues. In addition, respect for culture and diversity as well as affording learners the opportunity to make connections between local and global contexts and then share their understanding with others appear limited in most of our mathematics classrooms. Given the incredible power that teachers hold to make a difference to pupils' mathematical development, a reasonable point of entry for changing the narrative is a teacher education curriculum that inspires and develop highly-competent, reflective teaching professionals committed to the holistic development of their pupils and the improvement of society.

The course is designed to specifically develop and consolidate the basic mathematical knowledge and skills of student teachers in the domains of Geometry and Handling Data, taking account of the uses of mathematics in different local contexts as well as exploring learners' misconceptions and difficulties in these domains. The goals of this course are three-fold: a) to extend the mathematical knowledge and skills of student teachers in the domains of Geometry and Handling Data to a level significantly beyond what they are likely to teach in basic schools mathematics curriculum; b) to provide student teachers with a general understanding of the basic principles of teaching the basic school mathematics; and c) to support student teachers to develop appropriate practical approaches to teaching and assessment. Throughout the course, there is a strong emphasis on recognising the uses of mathematics in different local and global contexts as well as exploring learners' misconceptions and difficulties in these domains as specified in the National Teachers Standards.

Specific attention is given to topic areas that have consistently been flagged up in chief examiners' reports for senior high school core mathematics as difficult.

Course Title	**Learning, Teaching and Applying Geometry and Handling Data**						
Course Code		**Course Level:**	**100**	**Credit value:**	**3**	**Semester**	**2**
Pre-requisite	**Learning, Teaching and Applying Number and Algebra**						
,Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description	Geometry is a critical component of mathematics education because student teachers are required to relate concepts from geometry to geometric phenomena. It provides the necessary mathematical tools for complex reasoning and solving problems in the sciences, technology, engineering, and many skilled trades and professions. Handling Data also provides tools for describing variability in data and for making informed decisions. This course is designed to develop and consolidatethe basic mathematical knowledge and skills in the domain of Geometry and Handling Data taking into account uses of mathematics in different local contexts as well as exploring learners' misconceptions and difficulties in these domains. Student teachers will be required to demonstrate good understanding of all the areas covered by the senior high school core mathematics, especially areas where the chief examiners' reports have highlighted as difficult. There is the need to do auditing of subject knowledge to establish and address student teachers' learning needs, perceptions and misconceptions in Geometry and Handling Data. These areas include, but not limited to, bearing – representing the given information on a correct diagram; circle geometry and its applications; mensuration of plane and three dimensional shapes; drawing required diagrams correctly; geometrical construction; geometry and basic trigonometry with applications; representation of information in diagrams; congruence and similarities; finding angles and distances; global mathematics, introductory statistics and probability; cumulative frequency curve; drawing and reading from graphs; reading and answering questions from graphs; probability: meaning and application in real-life situations. The student teacher will also be required to demonstrate the ability to identify how their own individual characteristics (culture, ethnicity, religion, family constellation, socio-economic background, dis/ability, etc.). Differentiated approach to teaching will be used to ensure that student teachers will be supported in the area of Geometry and Handling Data. The course will focus on *mathematical content* on one hand and the *strategies and learning experiences in doing mathematics* on the other hand. These will be combined to form an integrated instructional approach that addresses the course learning outcomes. The instructional strategies will pay attention to all learners, especially girls and students with Special Education Needs. The course will be assessed using a variety of assessments methods including coursework (assignments, quizzes, project works, and portfolio entries with presentation) and end of semester examination to provide a comprehensive outlook of student teachers' competencies and skills. References are made to the following(NTS, 2b, 2f, 3j, 3m) and (NTECF p.30, p.39)						

Course Learning Outcomes (CLOs) with indicators	Outcomes	Indicators
	On successful completion of the course, student-teachers will be able to: **1.** Demonstrate deep understanding of key mathematical concepts in Geometry and Handling Data content domains in the basic school mathematics curriculum (professional values, knowledge & practice) (NTS, 2b)	• Select and use the most appropriate mathematical method(s) or heuristics in carrying out tasks/exercises/problems in Geometry and Handling data within the basic education mathematics foundation list. • Make connections between mathematical concepts in Geometry and Handling Data content domains and applying them to solve real-life problems. • Identify and resolve mathematics related learning difficulties within Geometry and Handling Data content domains such as inability to visualise geometrical shapes.
	2. Use manipulatives and other TLMs including ICT in a variety of ways in learning mathematics concepts in Geometry and Handling data (practical skills, digital literacy, problem solving) (NTS, 3j);	• Use manipulatives and other TLMs in developing Geometry and Handling data concepts. • Use ICT as a tool in developing Geometry and Handling data concepts. E.g. Geometer Sketchpad, Geogebra. • Use drawing tools to conduct geometrical investigations emphasising visualization, pattern recognitions and conjecturing. • Solve mathematics problems using manipulatives and/or technology related strategies in a variety of ways.
	3. Demonstrate value as well as respect equity and inclusivity as well as core skills in the mathematics classroom (knowledge)(NTS, 2f)	• Both tutors and student-teachers do individual reflection on their knowledge of Geometry and Handling Data. • Identify and reflect on core skills applied in the mathematics classroom. • Appreciate the contributions of, and supports, colleagues in the mathematics classroom. • Cooperate with colleagues in carrying out mathematics tasks in Geometry and Handling Data. • 3.5 Engage in reflective thinking about how mathematics was taught in student-basic and high school days.

	4. Demonstrate awareness of socio-cultural issues in teaching and learning mathematics in the content domains of Geometry and Handling data (knowledge) (NTS, 2f).		• Reflect and show how student-teachers' mathematics history influences their views of mathematics and its learning. • Identify appropriate TLMs for teaching topics in Geometry and Handling data. • Identify and use manipulates in Geometry and Handling data lessons	
Course content	**Unit**	**Topics**	**Subtopics**	**Teaching and learning activities to achieve learning outcomes**
	1	Plane Geometry (Patterns in shape): *Learning, teaching and applying*	Angles at a point, angles and parallel lines, angles and triangles. Properties of triangles, quadrilaterals and polygons. Learning about 3-Dimensional shapes: comparing polyhedral, forming 3-Dimensional shapes, Learning about 2-Dimensional shapes: polygons ($n \geq 3$), tessellations and applying these to the teaching of the JHS Mathematics curriculum, Congruence and similarities (teaching symmetry, congruence and similar shapes,)	Use tutor-led and student-led presentations on the teaching and learning of patterns in shape Use investigations to explore perceptions, properties and application of angles and polygons. Group discussion of the application of 2D and 3D shapes in real situations, Use shapes to explore properties of symmetry and congruency in the basic school mathematics curriculum, Explore through problem-solving application of congruence and symmetry.
	2	Geometrical Constructions: *Learning, teaching and applying*	Teaching measurement of a line, bisection of a line and angles and construction of basic angles (60^o, 90^o, 30^o, 15^o, 45^o). Teaching construction of other angles (eg. $75^o = 45^o + 30^o$, $105^o = 90^o + 15^o$). Teaching construction of triangles, quadrilaterals and loci and their applications in the basic school mathematics curriculum.	Use sets of construction tools to construct given shapes and angles. Use verbal exposition to identify common misconceptions from students' work in *construction*. Use group work to explore the relationships between the various angles that can be constructed

	3	Basic trigonometry: *Learning, teaching and applying*	Teaching and application of right-angled triangle, Pythagorean triples, trigonometry ratio (sine , cosine and tangent), trigonometry applications to real life	Tutor-led and student-led presentations on the application of trigonometric ratios. Using explorations to establish basic trigonometry ratios and their applications in the teaching of geometry.
	4	Vectors and Bearing: *Learning, teaching and applying*	Algebra of vectors, vector representation notation components of vector, vector operations, magnitude and direction of a vector, Teaching types of bearings and their applications Mathematical vocabulary related to vectors and bearing	Using worksheets on bearing to explore the relationship between angles in bearing and back bearing Discussing translation of word problems into mathematical statements in vectors and bearing
	5	Mensuration: *Learning, teaching and applying*	Teaching parts of a circle. Teaching measurement of length (arc length, radius, diameter, chord) Teaching area of a sector, area of segment, volume of cone, cylinder. Application of mensuration in real life problems	Project work – individual/group presentations on the application of circle concepts in real life situation
	6	Global Mathematics: *Learning, teaching and applying*	The earth as a sphere, lengths on latitudes and longitudes.	Tutor led presentations on lengths on a sphere Using worksheets for practical investigation to distinguish between latitudes and longitudes
	7	Introductory Statistics (Patterns in data): *Learning, teaching and applying*	Teaching collection of data, measures of central tendencies, measures of dispersion, graphical representation (cumulative frequency)	Project work – individual/group presentations on data collection Discussion on establishing the relationship between the measures

				of central tendencies and measures of dispersion.
	8	Basic probability: *Learning, teaching and applying*	Teaching basic concepts of probability: sample space, events, mutually exclusive and independent events. Applications to real life situation.	Interactive collaborative group work on probability. Exploring the concept of probability through experiments. Different ways of presenting probability through games in mathematics lessons.
Course Assessment (Educative assessment: of, for and as learning)	**COMPONENT 1:** Examination **Summary of Assessment Method**: Students should be summatively assessed by an examination linked to the themes listed below: • knowledge, understanding and applications of the key mathematical concepts in Geometry and Handling Data within the basic school mathematics curriculum. • use manipulatives and other TLMs including ICT in a variety of ways to establish Geometry and Handling Data concepts in the classroomhow their mathematics history influences their views of mathematics in the realm of social context and how this affects their way of learning mathematics. • relevant professional values and attitudes for teaching mathematics at Upper Primary level **Weighting: 40%** **Assesses Learning Outcome(s):** CLO 1, 2, 3, 4; (NTS 2b, 2f, 3j)			

Teaching/ Learning Resources	**Component 2: Coursework 1** **Summary of Assessment Method**: Individual Assignments with Presentations: Student teachers may be asked to • use ICT tools to conduct geometrical and statistical investigations emphasizing visualization, pattern recognitions, conjecturing etc. in a variety of ways. • select the most appropriate mathematical method(s) or heuristics (i.e. using mental strategies, models, paper and pencil, etc.) in carrying out tasks / exercises / problems in Geometry and Handling Data in the basic school mathematics curriculum. • reflect on how Geometry and Handling Data were taught in their basic school days and compare with current practice in basic schools. • reflect on the core skills and competencies (e.g. communication and collaboration, critical thinking and problem solving, digital literacy) teachers need to develop to make them good teachers. • engage in peer assessment on awareness of core skills and competencies needed to enhance own strengths and address limitations regarding the teaching and learning of Geometry and Handling Data. **Weighting: 40%** **Assesses Learning Outcome(s):** CLO 1- 4 (NTS 2b, 3j)
	Component 3: Coursework 2 **Summary of Assessment Method**: Self-Assessment (as part of their portfolio): Student-teachers should be given an assessment tool or questionnaire at the onset and the end of the course to • do self-assessment and compare their attitude towards learners, mathematics teaching and readiness to support learners who have misconceptions or struggle with the subject. • do self-assessment and compare their value as well as respect for equity and inclusivity in the mathematics classroom. • reflect critically on their own learning experiences and use them to plan for their own continuous personal development. • identify and reflect on mathematics related learning difficulties within the context of Geometry and Handling Data. **Weighting: 20%** **Assesses Learning Outcome(s): CLO 3, 4 (NTS 1a, 2f)**
	Maths posters Manipulatives and visual aids Computers and other technological tools Set of Mathematical instruments Geoboard (Geodot)

Required Text (Core)	Backhouse, J. K., Houldsworth, S. P. T. & Horril, P. J. F. (2005). *Pure mathematics 1*. (7th ed.). London: Longman. Gordor, B. K., Naandam, S. M., & Nkansah, B. K. (2012). *Core mathematics for senior high schools*. Accra: Sam-Woode Ltd. Ministry of Education (2015). *Core mathematics modules for SEIP*. Accra: Ministry of Education.
Additional Reading List	Hesse, C. A. (2012). *Core mathematics for senior high schools*. Accra: Akrong Publications Ltd. Ministry of Education. (2010). *Teaching syllabus for core mathematics* (Senior High School). Accra: Ministry of Education, Science and Sports. Martin, J. et. al. (1993). *Mathematics for teacher training in Ghana: Tutor notes,* Accra: Unimax Publishers. Martin, J. et. al. (1993). *Mathematics for teacher training in Ghana: Students activities*. Accra: Unimax Publishers.

Science

CONTEXT

The state of science education for our students is at an important crossroads. The youth of today will have to contend with enormous scientific challenges. Some of these issues include the lack of conceptual understanding among teachers and students, expanding infections in our environments, alternative sources of energy and inability to relate science to technology. Whereas the need for scientific advances is at its peak, there is the need to help improve our student teachers' learning in science to keep abreast with the changes in the world.

The learning activities for this semester therefore seeks to relate science to the learners' environment, make science culturally relevant, be gender and inclusivity friendly, provide for professional scientific attitudes and skills such as critical thinking, honesty, patience, sincerity, precision, and accuracy, have sensitive concepts explained within the appropriate local dialect and/or practices, and address misconceptions that could prevent students of diverse abilities and strengths from participating in any science lesson, integrate practical science activities into lessons. Age specialisms and transitions will be taken into consideration by incorporating special requirements for grade-level and age-level transitions into everyday lessons. The science teacher must ensure that different abilities and strengths/needs are catered for to ensure a safe working environment and equal opportunities for all group work and all practical activities.

Course Title	**Introduction to Integrated Science II**						
Course Code		**Level 100**	**Credit value: 3**		**Semester 2**		
Pre-requisite	Student teacher must have done year 1, semester 1 science course (SCE 111)						
Course Delivery Modes	**Face-to-face** ☒	**Practical activity** ☒	**Work-Based Learning** ☒	**Seminar** ☐	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description	The course for semester two of year one integrated science consolidates the basic science concepts of the student teacher from year 1, semester 1, on the following content areas: energy, basic electronics, health and hygiene, humans and the environment as well as science and technology and first aid. This course continues to emphasize on the essential practices, attitudes and values of professional science teaching such as honesty, carefulness, accuracy, sincerity, critical thinking, open mindedness and responsible citizenship. The student teacher, in this course, continues to develop the portfolio and prepares to make the necessary observation of professional practice in Supported Teaching in School (STS). This is done through appropriate pedagogies such as group demonstrations discussions, talk-for-learning approaches to identify important concepts, school visits, storytelling to trace events, concept mapping to define conceptual frameworks, pyramid discussions, simulations and multimedia presentations.						

	Authentic assessments modessuch as report writing, using checklist to identify critical values and skills, miniprojects, jigsaw puzzle, modelling and practical activities will be applied to assess the student teachers. Student teacher's attention on the need to ensure equity and special educational needs and disabilities (SEN) will also be provided. Student teachers will be able to demonstrate basic understanding and knowledge of the course and will be able to apply their understanding in the teaching process in their practicum and for later years. Also, the student teachers will have the essential attitudes and values, such as honesty, carefulness and accuracy in their professional career. (NTS 1b, 2b, 3a, p.13), (NTS 1d, p.12; 3e, p.14), (NTS, 3e, 3l, p.14), (NTS 2c, p.13), (NTS 3p, p.14), (NTS 1a, p.12)	
Course Learning Outcomes	**Learning Outcomes** On successful completion of the course, Student teachers will be able to:	**Indicators** Indicators for each learning outcome
	1. Recognise misconceptions, incorrect scientific ideas and bias about specified science concepts (NTS 2c, p.13 &21; NTS 3m, p.14)	• Designed diagnostic tool to unearth explain natural phenomenon using scientific knowledge. • 1.2 Provide charts that show student-teachers' explanation of natural phenomenon using scientific knowledge.
	1. Demonstrate that energy causes changes (NTS2b, p.12, 2c, p.13 & 21)	• Prepare a schematic diagram of energy changes from ice to water vapour • Provide a setup/drawing that show the effects of energy on matter
	2. Identify and name basic electronic appliancesas well as basic knowledge and understanding in recovery position of the first aid cardio-pulmonary resuscitation. (CPR). (NTS 2c, p.13 & 21)	• Construct diverse sketches that show named parts of electronic devices • 2.2 Exhibit recovery positions of resuscitation. • 2.3 Show how CPR is done.
	3. Demonstrate basic knowledge of the relationship between the environment and fundamental science theories (NTS 1g, 2c, p.12 &19)	• Prepare Analytical report on land degradation in the school community • Exhibit a critical review of one fundamental science theory
	4. Demonstrate significant ability to design and engage in practical activities and other alternative interactive assessment practices (NTS, 14, 19 & 23)	• Show models on electronic devices and energy sources by diverse learners
	5. Demonstrate basic ability to work as a professional science teacher in school and to identify their own professional needs in terms of science professional practice, knowledge,	• Provide a checklist to identify the values of patience, critical thinking, precision and accuracy in a peer review exercise

	values and attitudes - through this experience student teacher will be working towards meeting the NTS. (NTS 1b p14& 18, 14)			• Prepare a list of some examples of professional needs and some characteristics of professional teachers
Course Content	**Units**	**Topics:**	**Sub-Topics (if any)**	**Teaching and learning activities to achieve learning outcomes**
	1	Energy	i. Forms and sources of energy and fuels ii. Energy changes and transformation	• High order questioning to identify misconceptions/incorrect ideas about energy • (a) Discussions of forms of energy and fuels (b) Demonstrations on energy changes and transformations (c) Practical activities on energy transformation in an inclusive, multi-grade, and developmentally appropriate class rooms e.g. battery to light a bulb and pulling a catapult.
	2	Basic Electronics and First Aid	i. Identification of household electronic appliances ii. Uses of house hold electronic appliances iii. Basic recovery skills iv. Cardio-pulmonary resuscitation (CPR)	• Charts to identify household electronic appliances • Simulation and multimedia presentations on uses of household electronic appliances • Mixed ability group discussions on recovery skills. • PowerPoint presentations on CPR.
	3	Humans and their environment	i. Health and hygiene ii. Infections and diseases	▪ (a) Role play on personal hygiene (b)Problem-based teaching to identify preventive solutions to common infections and maintenance of environmental hygiene • (a) Diagnostic questioning to identify misconceptions/incorrect ideas about common infections (b) Group discussion and presentations on common diseases and infectionsin an inclusive, multi-grade, and developmentally appropriate classrooms.

			v. Natural Resources and their uses vi. Effects of human activities on the environment (gender issues)	• (a) Nature walk to observe natural resources in the school environment (b) Discussions on nature and types of natural resources. (c) Problem-based teaching on managing land and water resources • Video/ multimedia simulation on effects of human activities on land and water resources.
	4	Science and Technology	i. Contribution of science and technology to food & nutrition, health, transport, and information ii. Industrialization	• (a) High order questioning to identify misconceptions/incorrect ideas and biases about science and technology (b) Talk for Learning Approaches on the contribution of science to food, nutrition, health, transport and information • (a) Group discussions on industries and science in inclusive in an inclusive, multi-grade, and developmentally appropriate classrooms(Take into consideration differentiated strengths, abilities, etc) Student teachers to present group reports (b)Video/computer presentation on science and technology contribution to industrializations- student teachers to present individual reports. (c) Industrial visit to kenkey, bread, and alcohol industries.

	5	Writing Portfolio	i. Writing Portfolio for student reflective journal (SRJ)	• Reports on continued discussions on professional portfolio in an inclusive, multi-grade, and developmentally appropriate classrooms. • Portfolio and Student Reflective journal • Checklist to monitor classroom issues (e.g. teacher-pupils interaction, pupil-pupil interaction and inclusiveness).
Course Assessment	**Component 1**: Summative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Report writing/Charts/Presentations Core skills to be acquired: Cognitive, literacy, numeracy, writing and reading **Weighting**: 40 % **Assesses Learning Outcomes**: CLO1, CLO2, CLO3,CLO4& CLO 5,			
	Component 2: Formative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Presentations/Practical Activities//Group work Core skills to be acquired: Honesty, carefulness, accuracy and tolerance Core skills to be acquired: Honesty, carefulness, accuracy and tolerance **Weighting**: 40% **Assesses Learning Outcomes**: CLO 1 &CLO 5			
	Component 3: Formative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Evidence of portfolio;Seminar with students to discuss their teaching observation progress and areas for development. Core skills to be acquired: Pedagogical, observational and cooperative skills **Weighting**: 20% **Assesses Learning Outcomes**: CLO 1, CLO 2& CLO 3			
Instructional Resources	Some resources that would be required to successfully enable an inclusive integrated teaching would be Laboratory equipment, Chemicals, Smartphones,Tablets, Laptops, Desktop computer, Productivity tools (software that allow teachers to work better), Subject based instructional tools/applications, Instructional laboratories, Smart boards, Smart screens, Open ERs – YouTube, and virtual laboratories, Projector			
Required Text (Core)	Abbey, T. K., Alhassan, M. B., Ameyibor, K., Essiah, J. W., Fometu, E., & Wiredu, M. B. (2008). *Ghana association of science teachers integrated science for senior high schools*. Accra: Unimax MacMillan. Asabere-Ameyaw, A., & Oppong, E. K. (2013). *Integrated Science for the Basic School Teacher I*. Winneba: IEDE. Zumdahl, S. S., & Zumdahl, S. A. (2009). *Chemistry*. Belmont, CA: Cengage Learning.			

Additional Reading List	Abbey, T. K., &Essiah, J.W. (1995). Ghana Association of Science Teachers Physics for Senior High Schools. Accra: Unimax Macmillan. Ameyibor, K., & Wiredu, M. B. (2006). *Ghana Association of Science Teachers Chemistry for Senior High Schools*. Accra: Unimax MacMillan. Oddoye, E. O. K., Taale, K. D., Ngman-Wara, E., Samlafo, V., & Obeng-Ofori, D. (2011). *SWL Integrated Science for Senior High Schools: Students Book*. Accra, Ghana; Sam-Woode Ltd.

Music & Dance/PE

Context

The *Intersection of Physical Activity, Sport, Music and Dance for Upper Primary* ***course*** will be taught in a one-three-hour session in each week. Every 3-hour session in a week should be taught to promote the inter-disciplinary connections between and amongst various courses. It is recommended that extended evening practices should be required at least 3-days in a week from 3:30pm to 5:30pm each day to practice skills and concepts introduced in-class. This arrangement will allow **Physical Education** and **Music and Dance** course to alternate with **Social Studies** and **TVET**, increase opportunity to respond, and allow student teachers to master the content and address persistent CONTEXT and misconceptions such as:

1. **Transitioning from school to College.** Student teachers are introduced to core and transferable skills, self-awareness and knowledge about learners (including SEN) to support transition from school to college
2. **Physical education sport, music and dance content are not as important as numeracy and literacy content**. The content and the pedagogical experiences will reveal that physical education, sport and music are unique and worthy in their own right and cannot be compared to numeracy and literacy content. It will further reveal that, numeracy and literacy content can be reinforced in physical education, music and dance settings
3. **Sport, music and dance are for the less talented in academics**. Student teachers will know and apply music, dance and sport knowledge which sharpens cognition and reinforces important scientific and mathematical concepts. For example, addition, multiplication, use of force etc.
4. **First Aid and CPR has not been placed at the centre of learner's health, safety and protection in Colleges and Schools.** In regular classroom settings and during the performance of physical activity and dance programmes, there is the tendency for individuals to require first aid for exhaustion, dehydration and other emergency situations due to cold and heat exposure resulting from crowded arrangement and levels of exertion. The course will therefore, require the student teacher to gain the skills and the practical knowledge/experiences needed to perform/administer first/CPR on learners and colleagues, as first responder, in emergency situations in college and school settings. This component of the course will be an off the classroom training and certification at least 2 hours a day for three days in a week. This will be assessed both theoretically and practically.
5.

Course Title	**Physical Activity, Sport, Music and Dance for Upper Primary**						
Course Code		**Course Level: 100**		**Credit Value: 3**		**SEMESTER**	**2**
Pre-requisite							
Course Delivery Modes	**Face-to-face**[1] ☒	**Practical Activity**[2] ☒	**Work-Based Learning**[3] ☒	**Seminars**[4] ☒	**Independent Study**[5] ☒	**E-learning Opportunities**[6] ☒	**Practicum**[7] ☐
Course Description (indicate NTS, NTECF to be addressed)	The course exposes student-teachers to the nine dominant Ghanaian traditional musical genres, covering areas such as historical background, songs, musical instruments, drumming, dance patterns and embedded physical activities, and performance practices. In addition, student-teachers will be exposed to content knowledge, skills and understanding of the relationship between dance patterns and health-related physical fitness. Besides, the course will focus on						

	interdisciplinary connections between physical activity and music and other disciplines. Students will demonstrate understanding of cross-discipline connections and how they influence learner understanding in such areas as creative arts, mathematics, science, etc. In addition, the course will help student teachers to understand how physical activity and music communicate social, personal, cultural, or abstract theme from gestures and demonstrate how elements of creative arts connect with their personal interests, experiences, ideas, and knowledge and language arts skills in both first language and second language. Furthermore, student teachers will be taken through comprehensive experiences on pedagogical knowledge (PK), Technology, Pedagogical Content Knowledge (TPCK), pedagogical content knowledge (PCK) on one hand and developing positive professional attitudes and values with regards to the teaching of Physical Education and Music and Dance including inclusion, cross-cutting issues as well as the core values of the NTECF: honesty, integrity and responsible citizenry. The specific strategies for delivery will include review and analysis of documentaries orally and by written report/analysis of traditional dance activities; group presentations orally and by written reports; creative dance composition and performance project; portfolio building; singing assembly patriotic songs and demonstration of fundamental movement patterns with music. The strategies will ensure that all activities are respectful of every child's right to education and bodily integrity, as well as, ensure that all children can learn and benefit from education. The course will finally focus on the self-awareness of the student teacher, the characteristics of their learners, and issues concerning their transition from SHS to Tertiary. Modes of assessment will include summative, formative and practical work and portfolio building and will take into consideration strategies that can reach all manner of learners in the classroom. The course will address the following NTS/ NTECF: NTS 2c & 2d, NTECF p16; NTS 2e & 2f, NTECF p16; NTS 2e, NTECF p.20; NTECF p 23	
Course Learning Outcomes	**COURSE LEARNING OUTCOMES (CLO)**	**INDICATORS**
	On successful completion of the course, student teachers will be able to:	
	CLO 1 Demonstrate comprehensive content knowledge in how physical activity relates to music and exhibit understanding of cross-disciplinary connections and how they influence student teachers' awareness in such areas as creative arts, mathematics, science, etc. (NTS 2c & 2d, NTECF p16, 21, & Early-years, Primary and JHS PE/Music and Dance Syllabi.	• Show competence in cross-disciplinary connections between courses and show how this can reinforce (2) concepts from other courses in physical education, sport, music and dance setting. • Describe "My Self" and identify at least (2) strengths and weaknesses you possess • 1.3 Mention at least how three (3) characteristics of learners are culturally different or similar from your own background

	CLO 2 Use manipulatives, equipment and TLMs including ICT in a variety of ways in teaching physical activity and music concepts. (PK / PCK) **NTS** 2c & 2d, **NTECF** p16, 21)		• Select the most appropriate method(s) and justify the selection and interpret the results.	
	CLO 3 Demonstrate in-depth knowledge of inclusive, professional values and attitudes. (**NTS** 1a, 1b & 1d, **NTECF** p16, 38, 41)		• State at least 2 professional values and attitudes of the physical education and music and dance teacher in the basic schools. • Describe two activities you will put in place to inculcate the core values of honesty, integrity and citizenry, • Describe two strategies you will employ to eradicate gender barriers in physical education and music and dance.	
	CLO 4 Understand knowledge and understanding of how children develop and learn in diverse contexts so as to apply this in their teaching. (**NTS** 2e, **NTECF** p.20, 32).		• Identify ways to improve how the teacher can be adaptive in his/her strategies. • Describe how the various ways can be applied in teaching	
	CLO 5 *Music, Dance and Physical Education:* Build vocal repertoire of school assembly songs and fundamental movement concepts and patterns. **NTS** 2e & 2f, **NTECF** p 23,29		• Perform from memory the (a) Ghana National Anthem; (b) Yɛn Ara Asaase Ni; and (c) National Pledge. • Perform activities like walking, jogging, leaping, hopping, bending, twisting, galloping skipping	
	CLO 6 Demonstrate knowledge, skill and competence in the administration of first aid and cardio-pulmonary resuscitation on diverse learners and colleagues in emergency situations in schools. (NTS 3c; NTECF 21, 29, 38 & 41)		• Describe appropriate measures to be taken during emergency situations. • Attend to emergency situations appropriately as a first responder	
Course Content	**Units**	**Topics**	**Sub-topics**	**Teaching and learning strategies**
	1	Physical Activity and Ghanaian Traditional Musical Genres I	• Adowa • Kpanlogo • Agbadza	**Documentary Analysis**: Students teachers will watch documentaries: i-Box, T-TEL resources and YouTube and discuss the elements of music and physical activity and respond and connect to physical activities and musical concepts as they relate to the global recommendations.
	2	Physical Activity and Ghanaian Traditional Musical Genres II	• Bɔbɔɔbɔ • Kundum • Apatampa	
	3		• Bawa • Bamaya	

		Physical Activity and Ghanaian Traditional Musical Genres III	• Nagla • Takai	**Group Presentations**: Student teachers collect further research on the sub-topics and give group presentations in class. **Creative Dance Composition Project**: Student teachers will create individual works involving dance sequences (i.e., medley of traditional dances and song cycles) write notes to guide the performance, rehearse and perform it. **Class Discussion** regarding safety barriers that affect movement within the school built environment
	4	*Inter-disciplinary Connections I*: Dance, drama, media arts, music and visual arts through songs and videos pertaining to the community	Creative Arts	**Documentary Analysis**: Students will watch documentaries: i-Box, T-TEL resources and YouTube and discuss the elements of music and physical activity and respond and connect to physical activities and musical concepts as they relate to the global recommendations. **Group Presentations**: Student will further research the sub-topics and give group presentations in class. **Portfolio Building**: begin to build a portfolio of repertoire based on sub-topics in the course in addition to the STS school observation visit requirements.
	5	*Inter-disciplinary Connections II*: Building a repertoire of songs and physical activities pertaining to numbers, days of the week, months of the year, seasons, nature, weather, ecosystems, etc.	Mathematics and Science	
	6	*Inter-disciplinary Connections III*: Building a repertoire of songs pertaining to history, geography, *rite-de-passage* (i.e., life span), festivals in Ghana, etc.,	*Rite-de-Passage / Life Span*	
	7	Practical Performance	School assembly songs coupled with physical activities including a variety of dances	**Sing-along ICT Tools**: Watching documentaries from i-Box and YouTube and singing/dancing along or singing/dancing with a Tutor. **Group Presentation:** Choreographed physical activity movement patterns with music and presentations on meaning and moral values of lyrics of the assembly patriotic songs

	8	First and Cardio-pulmonary resuscitation	- Principles of first aid - Types and nature of emergencies - Equipment and materials - Treatment of emergencies - CPR	**Small group discussion** on principles and practice of first aid **Practical modelling and practice** in the treatment of emergencies **One-to-one performance** of CPR on manikins
Course Assessment **Educative assessment:** **of, for, and as learning.**	**Modes of Assessment**			
	Component 1: 30% Examination and Quiz CLOs 1, 2, 3, & 4 **(NTS 1a, 1d, 1d ,2c, d, e & f ;NTECF 16,20,21,23,32,38,38 & 41)** **Component 2:** 50% Documentary Analysis orally and written report by responding and connecting to physical activities and musical concepts; Group Presentations orally and written reports, Creative Dance Composition Project CLOs 1, 2, 3, & 4 **(NTS 1a, 1d, 1d ,2c, d, e & f ;NTECF 16,20,21,23,32,38,38 & 41)** **Component 3:** 20% Portfolio Building, Practical Exams, Singing assembly patriotic songs; Demonstration of fundamental movement patterns with music to foster innovation, personal development and digital literacy CLOs 2 & 5 **(NTS 2c , d, e & f ; NTECF 16,21, 23,39)**			
Instructional Resources	A modest recording and playback gadgets in the classroom or music room. 1. Compact Disc (Audio & Video) player with a recording facility (possibly with a detached microphone) 2. Electronic keyboard with synthesizer 3. Computers (Laptops or PCs) for playing back MP3 and MP4 files. 4. Video Camera, LCD Projector and Screen, Tripod and Monitoring Unit (for listening and recording, viewing and reviewing performances) 5. Few African drums (high-pitched, medium pitched, low pitched, master drum, and donno) 6. Cones, markers, whistles, stop watches, stadiometer, bathroom scale, skinfold calipers, tape measure, sit and reach box, heart rate monitors, medicine ball, free weights, dumb bells, rubber bands, goal ball, etc. 7. Balls for soccer, basketball, volleyball, handball, table tennis equipment, badminton equipment, etc.			

	8. First Aid/ CPR/AED : Participants Manual (2014) American Red Cross; Stay Well Health & Safety Solutions ; USA
Required Text (core)	**Physical Education** Corbin, C. B., Welk, G.J., Corbin, W. R. & Welk, K. A. (2008). *Concepts of physical fitness: Active lifestyles for wellness (14th ed*). Boston: McGraw Hill. Siedentop, D. (2007). *Introduction to physical education, fitness, and sport (6thed.).* Boston: McGraw – Hill. **Music and Dance** Mereku C. W. K. (2013*). We sing and learn: A legacy of songs for Ghanaian schools*. Sunyani: Kuapaye Ent. Ltd. Younge, P. Y. (2011). *Music and dance traditions of Ghana: History, performance and teaching*. Jefferson, NC: McFarland & Company, Inc.
Additional Reading List	**Physical Education** Ghana Education Service (GES) (2017). *Physical education and sports implementation guidelines*. Accra: Ghana Education Service. Nyawornota V.K., Aryeetey, R., Bosomprah, S., Aikins, M. (2013). An exploratory study of physical activity and over-weight in two senior high schools in the Accra Metropolis. *Ghana Medical Journal*, 47(4):197-203. Sarpong, E. O., Apaak, D. & Dominic, O. L. (2015). Reported physical activity levels and equipment use as predictors of body composition of members in Ghanaian fitness clubs*. Research Journali's Journal of Public Health*. 1, 4: 7-16. World Health Organization (2010). *Global recommendations on physical activity for health*. Geneva: WHO. **Music and Dance** Ebeli, E. (2018). *Teaching and learning Ghanaian traditional music*. Accra: WGCBC Publications. Mensah, A.A. (1971). *Folk songs for schools*. Accra: Ghana Publishing Corporation. T-TEL Professional Development Programme (2016). *Theme 5: Teaching and Learning Materials (Handbook for Student Teachers).* Accra: Ministry of Education Website: http://oer.t-tel.org. Nayo, N. Z. (Ed.) (1980). *Songs for Ghanaian schools: A collection of 50 art songs*. Winneba: National Academy of Music. Nketia, J. H. K. (1963). *Drumming in Akan communities of Ghana*. Edinburgh and London: University of Ghana and Thomas Nelson. **Online Resources** https://youtu.be/_MDrb24vfvM. – '*Sounds from Ghana*.' http://anthemworld.com/U.S.A.html.

Supported teaching in School

CONTEXT

Supported teaching in school needs to consider planning, placement and classroom practice of the student-teacher. The following are some of the CONTEXT which are likely to impact on the effectiveness of placements in Year one:

1 Structured administrative links among the GES, Schools, University/College do not exist.
2 Student-teachers often lack knowledge about cultural practices of some of the communities where they are placed.
3 Knowledge of reflective practice and classroom enquiry is not well developed among student-teachers, mentors, and tutors etc.
4 Student-teachers are not adequately equipped to handle issues on equity and inclusivity as well as differentiated learning.
5 Portfolio assessment, which provides evidence of student-teachers' practice is not included in their overall assessment which focuses on exams.
6 Poorly resourced partner schools do not provide appropriate environment for practice.

Course Title	**STS: Beginning Teaching (2)**						
Course Code		**Course Level: 100**	**Credit value: 3**	**Semester 2**			
Pre-requisite	Pedagogic studies in Year 1		STS - STS: Beginning Teaching (1)				
Course Delivery Modes	**Face-to-face**	**Practical Activity**	**Work-Based Learning √**	**Seminars √**	**Independent Study √**	**e-learning opportunities**	**Practicum**
Course Description	STS: Beginning Teaching (2) is a practical school-based component of the teacher education programme designed to give student-teachers the opportunity to observe, plan, and work collaboratively with peers and mentors in schools to understand the approaches to teaching and learning of children with diverse socio-cultural and linguistic backgrounds. The main aim of the course is to enable student-teachers to develop skills in conducting classroom enquiry (e.g. child study) to track progress of children's learning outcomes, acquire skills in purposeful reflection to improve their practice, and also continue to identify positive teacher-traits and professionalism in school. Other components of the course include student-teachers' ability to develop and keep a personal professional portfolio, continue to keep a student reflective journal, and write a teaching philosophy statement. In addition, the course is to enable student-teachers continue to analyse and understand key features of the basic education curriculum.						

	Assessment of the course will be by evaluation of the personal professional portfolio and its contents and child study report (NTS, 1f; 2b; & 3f). The course duration is: • Three (3) weeks visit in **School 1** (one day per week in school to observe) as well as - • Four (4) weeks in school teaching small groups during **College vacation.**	
Course Learning Outcomes	**OUTCOMES** **Upon completion of the course, student-teachers will be able to:**	**INDICATORS**
	CLO 1. Demonstrate knowledge and skills of observation and reporting on class teaching and wider school activities **(in School 1**)	• Show records of cooperative learning and/or group work activities among peers during observations • Make oral presentations of knowledge gained during observation by groups. • Provide records and reflections on specific observations from wider school environment and class teaching
	CLO 21. Demonstrate skills of working collaboratively to support the learning of small groups of children, under the guidance of mentors, children's backgrounds/experiences whatever their socio-cultural and linguistic (NTS, 1e)	• Provide records of collaborativework with others e.g. meet the obligations and expectations of others: mentors and peers. • Show records of discussions on the learning of children they worked with identifying differences in their learning
	CLO 3. Demonstrate knowledge and understanding of the key features of the basic school curriculum (BSC); and specifically focusing on core subjects and their associated expected learning outcomes (NTS, 2a).	• Show report on small group discussions with mentors & peers on the key features of the official basic school curriculum. • List identified key features in the BSC.
	CLO 4. Demonstrate knowledge and skills in carrying out child studies focused on children's learning and progress as classroom enquiry (NTS, 3b)	• Draw an activity plan of work with 4 identified children based on gender balance (if applicable), diversity and tracking of the learning and teaching approaches as well as progress in their learning • Collect and analze data on the identified children
	CLO 5. Demonstrate knowledge and skills in critical reflection on class teaching and wider school observations and record in student reflective journal (SRJ) (NTS, 1a)	• Provide records of teacher-pupils' classroom interactions and widerschool activities in SRJ using appropriate ICT tools

	CLO 6. Demonstrate skills in preparing and writing a STS: Beginning Teaching philosophy statement (NTS, 1f)			• Provide a write up of the beginning teacher's self-awareness, beliefs and values of teaching and learning
	CLO 7. Demonstrate knowledge and skills in developing a professional portfolio with evidence from observations and other achievements (NTS, 1a, e, f)			• Use appropriate ICT tools to compile artefacts & reports from observations and other achievements as contents in a professional portfolio showing creativity in design.
	CLO 8. Demonstrate skills in identifying traits of professionalism in school (NTS, 1d, 1f, 1g, & 2a)			• Provide SRJ recordings of demonstrated professional values and attitudes during engagements with people including pupils, mentors, tutors and peers.
Course Content	**Units**	**Topics**	**Sub-topics (if any)**	**Teaching and Learning Activities (strategies) to achieve learning outcomes:**
	1	**Observation**	Class teaching and learning	• Observation of a class with a checklist or taking field notes with particular attention to learners with difficulties • Observe class teaching and learning; teacher-pupils/pupil-pupil interactions • Observe and record good practices in whole class and small group teaching & learning • Observe and record peers carrying out collaboratively planned activity with their group or an individual, and how feedback is given on the learning.
			Wider school activities	• Observe and record wider school activities: staff meetings, assemblies and pupils' play/lunch time activities, attitudes and behaviours of teaching and non-teaching staff in school. (Use checklist of items to be observed and recorded, or Field notes recording strategies (ensure creativity in recordings)
	2	**Mentor/Student-teacher work Collaboratively**	Work plan of mentor & student-teacher	• Discuss work plan of Mentor-student-teacher indicating obligations & expectations • Discuss learning of children they worked with identifying differences in their learning • List findings from discussions.

	3	**Basic School Curriculum (BSC)**	Key elements of the BSC	• Engage student-teachers in group discussions with their mentors on BSC • Identify and compile list of key features of BSC
	4	**Child Study (Classroom enquiry)**	Items to be observed during child studies	• Select 1 or 2 children to be studied (consider gender balance) • Identify children's behaviours, cultural, linguistics, socio-economic and educational backgrounds • Consult appropriate resources to guide observations and to aid identification of learning and teaching approaches in children • Collect and manage data on 1 or 2 children's behaviour, learning style, progress of learning etc. and other characteristics. • Write report on the child studied
	5	**Student Reflective Journal (SRJ)**	Template of a reflective journal with key items (pay attention to inclusion & diversity)	• Use small groups/individual to analyse and evaluate sampled reflective journals that includes elements of inclusion & diversity • Assist student-teacher to acquire and improve reflective practice skills • Use ICT tools and given template to develop a personal reflective journals
	6	**Personal Teaching philosophy statement**	List items in a teaching philosophy	• Analyse and evaluate sampled teaching philosophy statements of teachers using pair work • List key elements in a typical teaching philosophy statement • Write a draft report of a personal teaching philosophy statement reflecting your own awareness of your transition from SHS to College
	7	**Develop professional portfolio**	Template for a professional portfolio	• Analyse and evaluate contents in sampled professional portfolios using group work • Design an outline of a professional portfolio • Continue to develop skills in professional portfolio building

				• Use ICT tools to collect and compile artefacts in personal professional portfolio
	8	**Traits of professionalism in school**	Professionalism traits	• Discuss in groups positive behaviours, attitudes and values of both teaching and non-teaching staff in the school
Course Assessment (Educative assessment: of, for and as learning)	*Note: All reports should consider braille and large font size prints (on request)* **Component 1: Professional Learning Portfolio (NTS, 1a, e, & f)** **Summary of Assessment Method:** Well organised, structured, reflective, representative, selective and creatively presented. Contents include: Personal teaching philosophy, Students' reflections in SRJ, Photographs/other artefacts, from observations and induction, Post observation seminar presentations) This is : assessment of learning and assessment as learning **Weighting: 50 %** **Assesses Learning Outcomes:** Develop a professional portfolio with evidence from student-teacher's observations and other achievements (CLO, 1, 2, 3).			
	Component 2: Mentors/Lead mentors and Tutors evaluation of student-teacher behaviour (values & attitudes) in School (NTS, 1d, e, f, & g) **Summary of Assessment Method:** Reports from mentors indicating student-teachers' punctuality, regularity, discipline, respect for authority, human relation skills (e.g. interaction with pupils & other teachers), participation in co-curricular activities, etc.; Tutors' feedback reports on student-teacher This is : assessment of, for and as learning **Weighting: 30 %** **Assesses Learning Outcomes: Identify traits of professionalism in school** (CLO, 1, 2, 3 & 5).			
	Component 3: Child Study Report (NTS, 3b) **Summary of Assessment Method:** Rubrics for assessment [Child profile, behaviour, strengths & areas for improvement, learning style, child's response to teaching approaches and recommendations and add-ons (Minimum of 3,000 words)] This is : assessment of learning and assessment as learning Weighting: 20 % **Assesses Learning Outcome**: Undertake child studies focused on children's learning and progress as classroom enquiry (CLO, 4)			

Instructional Resources	• Videos/audio visual/tactile analysis of mentoring and coaching • Videos/audio visual/tactile of Classroom teaching & learning • Samples of classroom observation checklists (braille and written) • Samples of professional teaching portfolios • Samples of reflective log • Teaching Practice Handbooks from Universities and Colleges of Education • T-TEL materials from www.t-tel.org • TESSA materials from www.tessafrica.org • Teaching practice handbook • Tutor professional development handbook
Reading Text Core)	Cohen, L.; Manion, L. Morrison, K., & Wyse, D. (2010). *A guide to teaching practice* (5th ed.) New York: Routledge. Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). *Pedagogy, curriculum, teaching practices and teacher education in developing countries. Education rigorous literature review*. Department for International Development.
Additional Reading List	Vavrus, F., & Bartlett, L. (2013). Testing and teaching. In F. Vavrus & L. Bartlett (Eds.), *Teaching in tension: International pedagogies, national policies, and teachers' practices in Tanzania (pp. 93-114).* Rotterdam: Sense. Ormrod, J.E. (2014). *Educational psychology: Developing learners.* Pearson: Boston. Lane, K. L., Carter, E. W., Common, C., & Jordan, A. (2012). Teacher expectations for student performance: Lessons learned and implications for research and practice. In Bryan G. Cook, Melody Tankersley, Timothy J. Landrum (Eds.) *Classroom behavior, contexts, and interventions: Advances in learning and behavioral disabilities* (Volume 25) Emerald Group Publishing Limited, pp. 95-129. Conn, K. (2014). *Identifying effective education interventions in Sub-Saharan Africa: A meta-analysis of rigorous impact evaluations* (Doctoral dissertation, Columbia University).

Year 2 Semester 1

Pedagogic Knowledge with ICT & Inclusion: SEN/Gender

PEDAGOGY I

CONTEXT

In Ghana, primary school teachers use a range of instructional strategies for learners with diversity in learning styles. Other teachers are also seen to be using various approaches to manage small and large class sizes found in different primary school settings across the country. Again, it is observed that primary school teachers need requisite skills in creating conducive learning environment that ensures accessibility and promotes learning in inclusive and multigrade primary schools. It has also been noted that primary school teachers need competencies that position them as curriculum leaders with a holistic understanding of how the curriculum should be implemented. Additionally, primary school teachers require more skills to enable them facilitate a smooth transition of primary school pupils from Upper Primary to the Junior High School. The course is thus designed to ensure that primary school teachers are fully equipped to facilitate and manage learning in primary school settings.

Course Title	**Differentiated Planning and Learning for Primary Schools**						
Course Code		**Course Level: 200**			**Credit value: 3**		**Semester 1**
Pre-requisite	**Foundations of Education in Ghana, Psychology of Human Development and Learning, Introduction to School-based Inquiry**						
Course Delivery Modes	**Face-to-face: [√]**	**Practical activity [√]**	**Work-Based Learning: [√]**	**Seminars [√]**	**Independent study: [√]**	**e-learning opportunities [√]**	**Practicum:[ ]**
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	The aim of the course is to expose student teachers to the concepts of differentiated learning, learning styles, the syllabus and their relationship to the curriculum. Additionally, it is designed to help them identify and explain the various principles applied in the selection of the four basic components of the syllabus and the curriculum particularly for learners within middle childhood stage. Student teachers will also be guided to examine differentiated instructional techniques and strategies for facilitating the learning of learners with diverse needs in varying learning environments and how these environments can be managed to improve learning. The course will be delivered using universal design for learning which includes varying interactive techniques and approaches with ICT to enable student teachers demonstrate and apply skills and strategies in planning, designing and facilitating learning in inclusive and multigrade settings. A wide range of methods and strategies including would be used to assess learning. It is expected that the course would equip student teachers with skills in designing Individual Learning Plans (ILPs) for smooth transition from the Upper Primary stage through to JHS **(NTS 1a, 2c, 3c, 3d, 3e, 3f, 3g, 3h, 3m, 3p; NTECF,p.28)**.						
Course Learning Outcomes	**On successful completion of the course, student teachers would be able to:**					**Indicators**	
	CLO 1. demonstrate an understanding of the concepts of differentiated learning, learning styles, syllabus and curriculum **(NTS 2c, 3d, 3e, 3f, 3g)**					• Explain the concepts of differentiated learning, learning styles and syllabus. • Describe the connections that exist among these concepts and the curriculum.	
	CLO 2. demonstrate an understanding and use of the criteria for selecting components of the syllabus/curriculum **(NTS 2c, 3a, 3c, 3d, 3e, 3f, 3g)**					• Discuss the basic components of the curriculum and explain the criteria for selecting components of the syllabus/ curriculum. • Apply the criteria for selecting the components in planning learning during supported teaching in schools.	
	CLO 3. dmonstrate understanding and use of differentiated instructional approaches and strategies in diverse learning environments to facilitate learning **(NTS 1a, 2c, 3c, 3d, 3e, 3f, 3g, 3m, 3p)**.					• Use creative and indigenous approaches in stimulating learning in inclusive and multi-grade classrooms. • Use collaborative and experiential learning approaches in facilitating learning in inclusive and multi-grade classrooms.	

				• Discuss learning approaches to facilitate learning in inclusive and multi-grade classrooms.
	CLO 4. demonstrate knowledge, understanding of the characteristics and the use of different strategies for managing inclusive and multi-grade learning environments **(NTS 3e, 3f, 3g, 3h)**.			• Differentiate among inclusive, multi-grade, and developmentally appropriate classrooms. • List and discuss the challenges of teaching inclusive and multi-grade classrooms • Discuss and apply the approaches and strategies for managing inclusive and multi-grade classrooms during supported teaching in schools.
	CLO 5. design and facilitate learning for learners with diverse needs and backgrounds in diverse learning contexts and design Individual Learning Plans (ILPs) **(NTS 3f, 3g)**.			• Apply various instructional strategies in planning learning for learners in diverse context and ILPs for learners with peculiar needs and abilities. • Demonstrate co-planning, co-teaching and peer assessment in inclusive/multigrade schools. • Select and use appropriate teaching learning materials (TLMs) to enhance learning during supported teaching in inclusive and multi-grade classrooms.
	Units	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes**
Course Content: Differentiated learning and curriculum planning	**1**	The concept of learning and curriculum planning	The concept learning, differentiated learning; Learning styles and learning strategies; The concept, nature and relationship between the curriculum and syllabus; curriculum terminologies; Basic components of the curriculum and the syllabus	Tutor led discussion on the concept of learning, differentiated learning, learning styles and learning strategies; Concept mapping/cartooning for the concept, nature and relationship between the curriculum and the syllabus with powerpoint; Group discussion and presentation on the basic components of the curriculum and the syllabus using models.

	2	Criteria for selecting basic components of the curriculum and syllabus	Taxonomies of educational objectives; Selection of objectives; Selection of content; Selection of learning activities/experiences; Assessment and evaluation.	Tutor led discussion with concept mapping and group presentations on the criteria for selecting components of the syllabus/curriculum; Individual project on how to apply the criteria for selecting the components in planning learning.
	3	Creative approaches and indigenous pedagogies	Role play, games, songs, storytelling, modelling and play (local and western approaches) for teaching various concepts	Audio-visual and tactile analysis of some creative and indigenous approaches to stimulate learning; Student-led demonstration on how to use creative and indigenous approaches to facilitate learning of concepts; mixed/gender based group projects on a compilation of local and foreign songs and games for teaching some concepts.
	4	Collaborative and experiential learning approaches	The concept collaborative and cooperative learning; group work (types, formation, managing, reporting back), project work, field work, demonstration, dramatization, problem solving and discovery, Inquiry Design Model (IDM).	Panel discussion on the use of collaborative and experiential learning approaches to facilitate learning; Student-led demonstration on how to use field work, students dramatize to facilitate learning and present report. Tutor demonstration of the use problem solving, discovery and IDM using case studies.
	5	Using questioning and Talk for learning approaches	Types and uses of questioning; talk for learning approaches (initiating, building, managing, structuring and expressing self in new words)	Teacher-led discussion on how to use questioning and talk for learning approaches to facilitate learning; demonstrate the use questioning and talk for learning approaches in teaching some concepts; Students undertake group research and presentation of talk for learning approaches
	6	Managing inclusive and multi-grade settings/classrooms	The concept and characteristics of inclusive, multi-grade, and developmentally appropriate classroom; challenges for teaching inclusive and multi-	Use audio-visuals, animations and teacher-led discussion on the concepts and characteristics of inclusive, multi-grade, and developmentally appropriate classrooms; Individual and group presentations on the challenges of teaching inclusive and multi-grade classrooms; Audio-visual and tactile analysis of how to apply the approaches and

			grade classroom; the concept classroom management, approaches and strategies for managing inclusive and multi-grade classrooms	strategies for managing inclusive and multi-grade classrooms
	7	Learning planning and preparation	Preparing to teach, scheme of work, components of a learning plan, factors to consider in planning learning for diverse learners in inclusive, multigrade settings and Individual learning Plans, selection of teaching learning materials (TLMs)	Group discussion and student-led demonstrations on how to apply the various instructional strategies in planning learning; Role plays on co-planning, co-teaching and peer assessment; Audio-visual and tactile analysis of facilitating learning in the classroom; co-planning, co-teaching and peer assessment of lessons.
Course Assessment (Educative assessment: of, for and as learning)	**Component 1**: Formative Assessment (QUIZZES) Summary of Assessment Method: Quizzes on differentiated learning, learning styles, syllabus and curriculum; and criteria for selecting components of the syllabus/curriculum(soft skills to be developed include: critical thinking, independent development, digital literacy, honesty) Weighting: 20% Assesses Learning Outcomes: CLO 1 and CLO 2			
	Component 2: Formative (Individual and group projects and presentations) Summary of Assessment Method: Group projects and reflective notes on the use of differentiated instructional approaches and strategies in diverse learning environments to facilitate learning; co-planning/ co-teaching and peer assessment(soft skills to be developed include: critical thinking, personal development, collaboration and communication) Weighting: 40% Assesses Learning Outcomes: CLO 3;CLO 4; CLO 5			
	Component 3: SUMMATIVE (END OF SEMESTER EXAMINATION) Summary of Assessment Method: End of semester examination on differentiated learning, learning styles, syllabus and curriculum; and criteria for selecting components of the syllabus/curriculum; the use of differentiated instructional approaches and strategies in diverse learning environments to facilitate learning; co-planning/co-teaching and peer assessment(soft skills to be developed include: honesty, critical thinking). Weighting: 40% Assesses Learning Outcomes: CLO 1,2,3,4,5			

	TESSA (2016). *Inclusive education tool kit*. Walton Hall: United Kingdom Transforming Teacher Education and Learning (2016). *Talk for learning: Professional development guide for tutors*. Accra. Ministry of Education (www.t-tel.org). Transforming Teacher Education and Learning (2016). *Group work: Professional development guide for tutors*. Accra. Ministry of Education (www.t-tel.org). Transforming Teacher Education and Learning (2016). *Creative approaches: Professional development guide for tutors*. Accra. Ministry of Education (www.t-tel.org). Transforming Teacher Education and Learning (2016). *Questioning: Professional development guide for tutors*. Accra. Ministry of Education (www.t-tel.org). Other Relevant Online Resources (www.Tess-india.net, www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khanacademy). The iBox (CENDLOS) YouTube
Teaching and learning resources	
Required Text (Core)	Abroampa, W. K. &Addai-Mununkum, R. (2017). *Rudiments of curriculum construction*. Acrra: Ducer Press. Adentwi, K. I. (2005). *Curriculum development. An introduction*. Kumasi: Wilas Press Ltd.
Additional Reading List	Enanati, T. Jameni, F. and Movahedian, M. (2016). Classroom management strategies and multi-grade schools with the emphasis on the role of technology. *Interdisciplinary Journal of Virtual Learning*, 7 (2), 167-179. Farrant, J.S. (1982). *Principles and practice of education*. London: Longman. Tamakloe, E. K., Amedahe, F. K., & Atta, E. T. (2005). *Principles and practice of teaching*. Accra: Ghana Universities Press. Mulkeen, A. G., &Higgin, C. (2009). *Multi-grade teaching in Sub-Saharan Africa. Lessons from Uganda, Senegal and Gambia*. Washington: World Bank. Ornstein, A. (1995). *Strategies for effective teaching*. London: Brown and Benchmark Publishers. Luzzatta, E. & Giordano, D. (Ed.) (2009). *Collaborative learning*. *Methodology, types and interactions and techniques*. New York: Nova Science Publishers Inc. Motitswe, J. M. C. (n.d.). *Teaching and learning methods in inclusive classrooms in the foundation phase*. Unpublished M.Ed. Thesis, University of South Africa, South Africa. Pratt, D. (1980). *Curriculum design and development*. New York: Harcourt Brace Jovanovich Publishers. Tyler, R. W. (1949). *Basic principles of curriculum and instruction*. London: The University of Chicago Press Ltd. UNESCO (2015). *Practical tips for teaching multi-grade classes*. Paris: UNESCO.

	Ziggah, S. R., Oppong Frimpong, S., Dzakadzi, Y. & Asemanyi, E. T. (2016). *Teacher education: From principles to practice*. Kumasi: Benjoy Enterprise.

CONTEXT

The use of varying learning resources in stimulating learning in primary schools is critical to any learning situation especially in this technologically-driven era. However, in most basic schools in Ghana, some teachers do not have equal access to adequate teaching and learning resources in teaching at the primary school level due to resource constraints. The need for teachers to be resourceful becomes imperative if they are to meet the ever-changing educational needs and competencies. Knowledge and skills required to identify, select and utilise multimedia resources for effective teaching and learning becomes one of the core competencies that will be required of the 21st century teacher. This course is expected to provide knowledge and skills for developing and using low cost instructional resources available in their communities to facilitate learning among primary school learners.

<table>
<tr><td>Course Title</td><td colspan="7">Multimedia Development and use for Primary Schools</td></tr>
<tr><td>Course Code</td><td colspan="2"></td><td colspan="2">Course Level: 200</td><td>Credit value: 3</td><td>Semester 1</td></tr>
<tr><td>Pre-requisite</td><td colspan="7">Differentiated Learning and Curriculum Planning, Introduction to ICT in Education and Psychology of human development and learning</td></tr>
<tr><td>Course Delivery Modes</td><td>Face-to-face: [√]</td><td>Practical activity[√]</td><td>Work-Based Learning: [√]</td><td>Seminars[√]</td><td>Independent study [√]</td><td>e-learning opportunities [√]</td><td>Practicum: [√]</td></tr>
<tr><td>Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)</td><td colspan="7">The course is structured to expose primary school student teachers to the concept and nature of multi-media development and educational technology. Student teachers are guided to examine some constructivist theories and principles of learning suitable for primary school learners. The course further focuses on various types of instructional media; how to develop, adapt learning materials to suit diverse learners, develop adaptive and assistive technologies for learners with SEN. Student teachers will also be guided to examine ways of evaluating, auditing and storing learning resources developed. Among others, the course will be delivered through demonstrations, projects, presentations, gallery work and peer assessment. Similarly, diverse methods including projects, gallery work and presentations would be used to assess student teachers. It is expected that this would enable student teachers to use various criteria in selecting materials and also apply principles in developing and using varying multimedia and low-cost learning resources in facilitating and stimulating learning among differently abled learners in inclusive and multigrade classrooms to improve learning. It will also equip student teachers of middle childhood learners with skills to manage transition from the Upper Primary stage through to JHS (NTS 1a, 3g, 3j, 3f; NTECF, p. 45)</td></tr>
<tr><td rowspan="2">Course Learning Outcomes</td><td colspan="4">On completion of the course the student teacher would be able to:</td><td colspan="3">Indicators</td></tr>
<tr><td colspan="4">CLO 1. demonstrate a clear understanding of how the misconceptions, barriers to developing and using materials can be addressed and also distinguish between the concepts of multimedia, educational technology and instructional technology (NTS 3m).</td><td colspan="3">• Identify some misconceptions and barriers to developing and using multimedia materials to support learning and explain how to address them.
• Distinguish among the concepts of multimedia, educational technology and instructional technology.</td></tr>
</table>

	CLO 2. exhibit an understanding and application of the constructivist theories and the principles of learning in the use of learning materials (**NTS 2e**)			• Discuss the relevance of the constructivist theories to use of learning materials in diverse contexts. • Apply the principles of learning in the use of learning resources in diverse learning settings.
	CLO 3. demonstrate knowledge and application of the basic elements and principles of creating visual designs using different media production techniques with low/no-cost materials and their evaluation with respect to SEN/gender suitability (**NTS 3m**).			• Develop a learning material/model for learning any concept in a specific subject area by applying the basic elements and principles of visual design using imitative media production technique. • Develop a learning material/model for learning any concept in a specific subject area by applying the basic elements and principles of visual design using adaptive media production technique. • Develop a learning material/model for learning any concept in a specific subject area by applying the basic elements and principles of visual design using creative media production technique. • Conduct SEN/gender evaluation and audit of learning resources create various appropriate ways of storing them.
	CLO 4. demonstrate an understanding of the relevance and the use of technology (computers, mobile devices) in creating communication, and teaching and learning applications (NTS 3m).			• Discuss the relevance of the use of computers and handheld mobile devices in developing communication, and teaching and learning applications. • Use computers or handheld devices in developing applications for communicating/collaborating with colleagues and creating learning resources.
Course Content: Multimedia Development and Use	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes:**
	1	Nature of multimedia use in learning and conceptual issues	Conceptions, misconceptions and barriers to developing multimedia resources and use; The concept multimedia, educational technology and instructional technology;	Use pyramid discussions with mixed ability/gender based pairings for misconceptions/barriers for using multimedia resources; tutor led discussions on conceptual issues; using powerpoint to map or model the development of educational technology

			technology in education and technology of education; history of educational technology	
	2	Theories and principles of learning and instruction	Concept of learning; principles of learning; Constructivist theories (e.g. Vygotsky and Piaget)	Student led discussion and panel discussion on the relevance of constructivist theories for multimedia use; using cases/ scenarios and concept mapping for the application of principles of learning.
	3	Instructional media production	The concept of instructional media; Types of instructional media; Characteristics of media; Edgar Dale's "Cone of Experience"; Classification of instructional media; Techniques of instructional media production	Use animations/pictures on powerpoint to stimulate discussion on types and characteristics; mixed ability/gender based group discussion and project on the techniques of media production
	4	Instructional and visual design	Basic elements of visual design; Principles for creating visual design;; Instructional design models (only Dick & Carey's model; ADDIE model)	Student led discussion with powerpoint presentation on basic elements and principles of visual design; develop models on powerpoint for discussion on designing models
	5	Models and material adaptation for inclusive classrooms and their uses	Types of models (solid, cross section, construction and working models); diorama and puppets; Ways of developing learning materials using low/no cost resources; criteria for selecting materials; factors behind ineffective materials; Adaptive and Assistive Technologies (AATs) for SEN	Tutor led discussion on types of models and uses animations/visuals on power point; individual and group project on developing materials/models for teaching specific concepts with commentary; tutor led discussion on AATs (co-teach with SEN specialist)

	6	Handheld technologies (mobile and wireless learning)	The concept handheld technology; Properties and relevance; communication and collaborating applications, and teaching and learning applications.	Tutor led discussion on use of handheld devices, properties and relevance; demonstration and group project on creating collaborating and teaching and learning applications.
	7	Storage and evaluation/audit of multimedia learning resources	Need for storage of resources; ways of storing types of resources; SEN and gender audit/evaluation of resources using checklists	Group discussion on ways of storing resources; Audio-visual and tactile analysis of how multimedia resources are stored. Tutor led discussion on criteria for evaluating resource suitable for learners with diverse needs.
Course Assessment	**Component 1**: Formative Assessment (INDIVIDUAL AND GROUP PRESENTATIONS) Summary of Assessment Method: i. mixed ability/ gender based group presentation on misconceptions/barriers and how to address them. ii. group presentation on conceptual issues on multimedia development, constructivist theories and principles of learning. Weighting: 20% Assesses Learning Outcomes: CLO 1 and CLO 2			
Course Assessment (Educative assessment: of, for and as learning)	**Component 2**: Formative Assessment(Individual and group projects) Summary of Assessment Method: Individual mid semester project using imitative and adaptive production techniques and applying principles of design on media/model development using creative production technique; developing learning resources and applications using computer or handheld devices. All projects MUST come with commentaries of why, what, how it should be used and how to store them. Some projects should be assessed by peers. Conduct SEN/gender audit and evaluation of material developed with reports (soft skills to be developed include: critical thinking, digital literacy, respect for diversity) Weighting: 40% Assesses Learning Outcomes: CLO 3 and CLO 4			
	Component 3: Summative (End of Semester Examination) Summary of Assessment Method: End of Semester Examination on multimedia development, constructivist theories and principles of learning using imitative and adaptive production techniques and applying principles of design on media/model development using creative production technique; developing learning resources and applications using computer or handheld devices (soft skills to be developed include: critical thinking, honesty) Weighting: 40% Assesses Learning Outcomes: CLO 1,2, 3 and 4			

Learning Resources	Computers, tablets and mobile phones, projectors Solid models, cross section models, working models, dioromas etc. Adaptive and assistive devices Other Relevant Online Resources (www.Tess-india.net) T-TEL (2017). *Teaching and learning materials.* Accra: Ministry of Education
Required Text (Core)	Adeoye, B. F. (2015). *Technology guide for teaching & learning.* Ibadan-Nigeria: His Lineage Publishing House. Amoah, S. A., Laryea, P., & Amoako, B. M. (2016). *Fundamentals of educational technology for effective teaching and learning.* Winneba: University Press. Sarfo, F. K. (2008*). Educational technology*. Kumasi: Wilas Press Ltd. Transformaing Teacher Education and Learning (2017). *Teaching and learning materials.* Accra: Ministry of Education.
Additional Reading List	Driscoll, M.P. (2005). *Psychology of learning for instruction*. Boston: Pearson Education Inc. Gagne, R.M. & Briggs L.J. (1979). *Principles of instructional design (2nd ed.*). New York: Holt, Rinehalt, & Winston. Gerlach, S. V., Ely, P. D., & Milnick, R. (1980). *Teaching and media: A systematic approach*. New Jersey: Englewood Cliffs. Heinich, R., Molenda, M., Russel, J. D., & Smaldino, E. S. (1996). *Instructional media and technologies for learning (5thed).* Prentice Hall. Rowntree, D. (1982). *Educational technology in curriculum development*. London: Harper and Row. Smaldino, S.E., Lowther, D.L., & Russell, D.J. (2008). *Instructional technology and media for learning* (9th ed.). Upper saddle River, NJ: EngleCliff Woods.

Language and Literacy

CONTEXT

This course aims at training student teachers to acquire essential capacities to teach speaking and listening at the Upper Primary (P4-6) in order to develop all learners' literacy skills and to facilitate a smooth transition from P4-6 to upper primary in the area of speaking and listening. The course has been designed against the background of teachers having limited skills in; teaching speaking and listening, developing their own materials for teaching speaking and listening and integrating ICT into the teaching of speaking and listening. In addition, there is the misconception that speaking and listening is not part of literacy and that teaching speaking and listening is the responsibility of only language teachers. Also, teachers have not been trained to integrate teaching speaking and listening in one lesson. This notion has resulted in the neglect of developing learners' speaking competencies in the classroom and consequently, poor transitioning of learners from Primary 3 to P4 and from P6 to JHS1 in terms of developing speaking skills. Furthermore, during speaking and listening lessons, often, most of the speaking is done by teachers rather than learners. This course is therefore, designed to rectify all these anomalies.

Course Title	**Literacy (Teaching Speaking and Listening)**						
Course Code		**Course Level: Level 200**	**Credit value: 3**		**Semester 1**		
Pre-requisite	**Trainees have studied introduction to language and literacy**						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activities** ☒	**Work-Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**E-Learning Opportunities** ☒	**Practicum** ☐
Course Description for significant learning (NTS, NTECF addressed)	The aim of this course is to expose student teachers specialising to teach at P4-6 to the various skills of teaching speaking and listening. The course integrates the teaching of speaking and listening. The course begins with the introduction of student teachers to the concept of speaking and listening and how it contributes to language learning and literacy development. The course seeks to equip student teachers with the skills in materials development for teaching speaking and listening and techniques in assessing speaking and listening at P4-6 level. It will also provide student teachers with the skills to integrate technology into teaching speaking and listening to enhance P4-6 learners' literacy skills. The course exposes student teachers to the speaking and listening component of the Upper Primary curriculum. Besides, the course provides student teachers with the needed skills to help them to critically reflect on speaking and listening activities and how to apply them in the P4-6 classroom. The course also builds teachers' capacities to teach integrated speaking and listening in real classroom situations by team teaching with mentors or peers. The course places emphasis on planning appropriate integrated lessons taking into consideration all manner of learners and their needs. The course will be delivered through student-centred approaches such as discussion, project work/seminars, class presentation, observation/school visits, role-play and practical teaching. Other modes of delivery are checklist, think-pair-share, demonstrations, and child study. The assessment strategies for, of, and as learning will include quizzes/assignments,						

	examinations, presentations, report writing, and portfolios. The course is aimed at achieving the following NTS requirements:1 a, 2 c, d, 3 b, c, e, g, I, j, k, l and m, and NTECF p. 25 bullets 2, 3, 5, 6, 11, 13 and 14.	
Course Learning Outcomes	On successful completion of the course, student teachers will be able to:	
	Learning Outcomes	**Indicators**
	1. Demonstrate understanding and knowledge of the concepts of speaking and listening and their roles in literacy development of JHS learners, and misconceptions of speaking and listening in literacy development and components of speaking and listening. (NTS 2c, d, NTS 3e and NTECF 3, p.25)	• Define the concept of speaking and listening. • Identify the roles speaking and listening play in Upper primary (P4-6) learners' literacy development • Identify the misconceptions of speaking and listening in learners literacy development • Discuss the components of listening and speaking appropriate approaches to teaching speaking and listening at P4-6.
	2. Demonstrate knowledge and understanding of appropriate speaking and listening techniques/activities to teach P4-6 learners with diverse needs and interests to enhance their speaking and listening skills. (NTS 2d, 3e, g, m, k, NTECF bullets 2 and 5 (p. 25)	• Identify appropriate approaches that address the diverse needs and interests of learners to assess P4-6 learners' speaking and listening skills. • Evaluate how these techniques are practiced in schools to address the diverse needs of learners in speaking and listening. • Use appropriate teaching techniques to address the diverse speaking and listening needs and interests of learners to smoothly transition from home to school, from P3 to P4 and from P6 to JHS 1. • Apply the techniques/activities learned in the classroom in teaching speaking and listening at P4-6 level to address the diverse needs and interest of learners.
	3. Integrate technology in preparing appropriate TLMs to teach speaking and listening effectively to enhance literacy in speaking and listening among P4-6 learners bearing in mind their interests and needs (NTS 3j and NTECF bullet 10, p.25).	• Identify appropriate technology tools that can be used in teaching speaking and listening • Use appropriate technology to prepare speaking and listening TLMs which fits the diverse needs and interest of learners in the P4-6. • Use appropriate teaching learning materials for teaching speaking and listening which address the diverse needs and interest of P4-6 learners to enhance their speaking and listening skills.

	4. Use appropriate methods/tools to assess the speaking and listening skills of diverse P4-6 learners (NTS 3k and NTECF bullet 6, p.25)			• Identify appropriate methods/tools which address the diverse needs of learners to assess the speaking and listening of P4-6 learners. • Observe how these methods are used in assessing speaking and listening to improve the literacy skills of all manners learners at the P4-6 level to address their speaking needs. • Use appropriate assessment methods/tool as developing teachers to assess speaking and listening skills of P4-6 learners.
	5. Interpret and understand key features of the speaking and listening component of the P4-6 English curriculum (NTS 2b, d; NTECF bullet 11, 13; p. 25)			• Interpret the speaking/oral and listening components of the P4-6 English curriculum and how they cater for the needs and interests of diverse learners in the classroom. • Plan a scheme of work from the P4-6 speaking and listening curriculum.
	6. Plan and co-teach lessons in speaking and listening by integrating them to cater for the needs and interests of diverse P4-6 learners (learners NTS 3 g, l, m, NTECF bullet 13; p.25			• Plan an integrated speaking and listening lesson that cater for the diverse needs and interest of learners in the JHS 1-3 level. • Co-teach a speaking and listening lesson using the integrated lesson plan designed to reach all manner of learners in the P4-6 level to enhance their speaking and listening skills. • Discuss with mentor/teacher on issues that emanated from the lesson delivered.
Course content	**Units**	**Topics**	**Sub-Topics**	**Teaching and learning activities to achieve learning outcomes**
	1	Introduction to teaching speaking and listening	1.1 Speaking and listening and language learning 1.1.1 Definition of speaking and listening 1.1.2 Role of speaking and listening in language learning 1.2 Misconceptions of speaking and listening	• **Discussion** (teacher leads discussion by first introducing the topic through lecture (using powerpoint) followed by class discussion on the topic. Teacher provides feedback to make students contribute effectively) • **Group work** (students are put in groups to brainstorm on the role of speaking and listening in language learning and later present their work orally to class for peer critique) • **Discussion** (teacher introduces the topic and leads in discussion by using leading and probing questions for students to identify the components of speaking)

			1.3 Components of speaking. 1.3.1 Pronunciation 1.3.2 Grammar 2.3.3 Vocabulary 1.3.4 Fluency 1.3.5 Comprehension 1.3.6.Effective oral instruction	• Class Discussion (Teacher use leading and probing questions to helps learners identify the misconceptions of speaking and listening in literacy development of learners • **Think, pair, share:** Teacher asks students to individually think about the various components of speaking, how they contribute to oral communication and how teachers can use them with diverse students' needs and interest in mind. Ask students to share/discuss their answers in pairs and finally expand their discussion to the whole class by calling students to share their responses. • 6. **Checklist** (students used their prepared checklist to find out if their objectives for the lesson have been met)
	2.	Teaching Speaking and listening strategies for teaching JHS 1-3 learners	2.1 Speaking strategies 2.1.1. Storytelling 2.1.2. Using open-ended question and answer 2.1.3. Group discussion/debates 2.1.4. Reinforcing active speaking and listening 2.1.5. Description of places/things/people 2.1.6 Use of audio/audio-visual 2.1.7 Modelling speaking and listening 2.2. Listening techniques 2.2.1 Listening comprehension 2.2 Problems of using the strategies	▪ Group Work (Put students teachers in groups and assign one teaching strategy to a group to discuss how each strategy can be used to promote the speaking and listening skills of the JHS learner and how such strategies can be used to address the diverse needs and interest of learners to enhance their speaking and listening skills. Students use powerpoint to present their work) ▪ School Visit (Students visit schools and observe how teachers use these strategies to develop the speaking and listening skills of all learners and the advantages and disadvantages of each strategy. Student teachers write report on their visit and present in class). ▪ Discussion (After school visit, students discuss their observation in class and come out with effective strategies to employ in enhancing JHS learners' speaking skills taking into consideration learners' diverse needs and interests). ▪ Video (student teachers are shown video of speaking and listening problems of P4-6 learners. Student teachers then discuss the speaking problems identified in the video)

				▪ 5. School observation (student teachers visit schools to get first-hand information on speaking and listening problems of learners and compare with what they observed in the video)
	3	Technology and developing P4-6speaking and listening materials	3.1.1 What are speaking and listening LTMs 3.1.2 Using technology to prepare and use JHS speaking and listening materials 3.1.3 Challenges of using Technology to produce materials for teaching speaking and listening	▪ Group Work (Student teacher work in groups and research on factors that affect the preparation and use of speaking and listening materials for P4-6 learners and present to class) ▪ Technology use (student teachers learn how to use computer to develop a speaking and listening material and also use online speaking and listening materials as teaching resource) ▪ Demonstration (Student teachers prepare their own teaching materials using technology and use them to teach a selected topic which address the diverse needs and interests of learners in speaking and listening in the classroom) ▪ Discussion (student teachers work in groups to discuss the challenges the face using technology to produce TLMs and how to address the challenges)

	4	Assessing P4-6 learners speaking and listening skills	4.1 Assessing speaking and listening skills of P4-6 learners 4.1.1 Assessing P4-6 learners' oral language skills 4.1.2 Assessing speech production (pronunciation) 4.1.3 Assessing comprehension of oral language 4.2.1 Problems of assessing speaking and listening skills of P4-6 learners	• Discussion (student teachers are put in groups to discuss ways of assessing various aspects of speaking. Later, teacher leads discussion to determine best forms of assessing speaking and listening at the P4-6 level to cater for diverse learners' needs and interests. • Problem-solving (Teacher puts learners in groups and ask each group to brainstorm on the problems of assessing the speaking skills of learners and ways to address the challenges) • School visits (Student teachers visit schools to observe how teachers assess the various components of speaking taking into consideration of diverse needs and interests of learners and the challenges they face and how they address such challenges and write reports on it) • Child study (Students teachers practice using appropriate assessment tools on a learner to assess the various component of speaking taking)
	5	The Upper Primary speaking and listening component of the P4-6 curriculum	5.1 Interpreting the P4-6 speaking/oral and listening components of the curriculum 5.2 Deficiencies in the curriculum	• Discussion (Teacher leads student teachers to discuss the content of the speaking and listening component of the P4-6 curriculum • Review (student teachers work in groups and use their knowledge of the curriculum to identify the deficiencies in the speaking and listening component of the curriculum and how to address the deficiencies. • Practical work (students teachers design a scheme of work from the P4-6 curriculum and share with class for review)
	6	Plan and co-teach speaking and listening lesson with mentor/tutor or colleague	6.1The speaking and listening lesson plan 6.1.1. Components of a speaking and listening lesson plan (pre-, in and post) 6.1.2. Teaching an integrated speaking and listening lesson	• Discussion (teacher leads student teachers to identify and understand the parts of a speaking and listening lesson and develop an integrated speaking and listening lesson plan to cater for the diverse needs and interests of P4-6 learners) • Demonstration (student teachers prepare an integrated speaking and listening lesson plan which targets the diverse learners in the classroom from the scheme of work designed and co-teach with colleague in class)

Course Assessment (Educative assessment of, for, and as learning)	**Component 1:** Assessment of learning (summative assessment) Summary of Assessment Method: 2 short diagnostic quizzes and 1final exam on the concept and role of speaking and listening in language acquisition and literacy development, use of appropriate strategies to teaching speaking and listening, assessment tools used to assess speaking and listening, use of technology in teaching speaking and listening and interpreting and understanding the P4-6 speaking and listening components of the P4-6 curriculum and its deficiencies. *(Cores skills targeted are communication, collaboration, team work, creativity, and digital literacy)* Weighting: 40% Assesses Learning Outcomes: Learning outcomes measured 1, 2, 3, and 4
	Component 2: Summary of Assessment Method: Assessment for and as learning (2 Group presentations , 1 Individual presentation and class participation *(cores skills targeted are communication, enquiry skills, collaboration, team work, creativity, and digital literacy)* Weighting: 30 % Assesses Learning Outcomes: (Course learning outcomes measured 5 and 6)
	Component 3: Summary of Assessment Method: 2 observations and 1 report writing on school visits *(Cores skills targeted are communication, collaboration, team work, enquiry skills, creativity, and digital literacy)* Weighting: 30% Assesses Learning Outcomes: Course learning outcomes measured are 5 and 6
Instructional Resources	1. Teaching Speaking and listening Skills to ELL Students: Methods & Resources 2. Video – Teaching speaking skills: Strategies and methods https://study.com/academy/lesson/teaching-speaking-skills-to-esl-students-methods-resources.html 3. Teaching Listening Skills to Children https://study.com/academy/lesson/teaching-listening-skills-to-children.html 4. Every day Literacy: Listening and Speaking, Grade 1 - Teacher's Edition, E-book 5. Computers 6. Video recorders 7. Projector 8. Language Laboratory 9. Camera
Required Text (Core)	Owu-Ewie, C. (2018). *Introduction to language teaching skills: A resource for language teachers.* Accra: Samwoode Publishers. Carroll, M. J., Bowyer-Crane, C., Duff, F. G., Hulme, C. & Snowling, M. J. (2011). Develo*ping language and literacy: effective intervention in the early years*. West Sussez, UK: Wiley-Blackwell.

Additional Reading List	Bailey, K. (2005). *Practical English language teaching: Speaking*. New York: McGraw-Hill. Fountas, I. C & Pinnell, G. S. (2017). *Literacy continuum: A toll for assessment, planning and teaching.* Portsmouth, NH: Heinemann. Long, M & C. Doughty, C (2009).*The handbook of language teaching*. Chichester: Wiley-Blackwell. Palmer, E. (2014). *Teaching the core skills of listening and speaking*. Stenhouse Publisher. Palmer, E. (2011). *Well spoken: Teaching speaking to all students.* Stenhouse Publishers. Thornbury, S. (2005). *How to teach speaking.* Pearson Education Ltd.

Specific Contextual Issues:
Some ITE learners enter the programme with no basic knowledge of the orthography of a Ghanaian language and this poses a great challenge to the teachers. Also because of ITE learners' weak entry level in knowing the orthography of a Ghanaian language, teaching and learning of principles and rules of a Ghanaian language poses a challenge which negatively affects their ability to apply the rules of writing. The Upper Primary ITE teachers themselves do not have adequate knowledge of the principles and rules of a Ghanaian language and that equip them adequately to support the early learners' learning. Currently there are no computers with keyboards that have the letters of the alphabet of any Ghanaian language, thereby making integration difficult. This course therefore, seeks to equip the student teacher with the requisite knowledge and skills in applying the principles and rules for the spelling and writing of a Ghanaian language.

Course Title	**PRINCIPLES AND RULES OF A GHANAIAN LANGUAGE WRITING**						
Course Code		**Course Level: 200**	**Credit value: 3**	**Semester: 1**			
Pre-requisite	**N/A**						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Leaning** ☐	**Seminars** ☐	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF to be addressed)	This course seeks to equip student teacher with the requisite knowledge of the principles and rules for the spelling and writing of Ghanaian language. The student teacher will be taken through the orthography of a Ghanaian language to identify the sounds and the letters of the alphabet used to represent them. The student teacher will also be guided with the requisite skills to recognise the linguistic rules and principles that have been used in the designing of the orthography such as dialectal variations, sound systems (vowels and consonants), word boundary, vowel harmony, tone, etc. to be able to apply the knowledge and the skills that govern the rules and the writing of a Ghanaian language respectively in teaching a Ghanaian language. The course will be taught by the following pedagogical modes: discussion, group/individual work presentation, classroom observation, brainstorming, and demonstration. The course will be assessed through examination, class assignments and presentations, checklist for learning outcomes, demonstration, peer assessment, report on classroom observation, report on supervision by mentors/lecturers, portfolio, and class participation. The course is designed to meet the following NTS, NTECF, BSC, GLE expectations and requirements: (NTS 2c: 12), (NTS 2e: 13), (NTS 2f: 13), (NTS 3e: 14), (NTS 3j: 14), (NTS 3e: 14), NTECF 3 (p25), (NTECF p.45) and NTECF 6 (p25).						
Course Learning Outcomes including INDICATORS for each learning outcome.	On successful completion of the course, the student teacher will be able to:						

	Learning Outcomes	Indicators:
	1. demonstrate knowledge of the principles and rules in the writing of a Ghanaian language. (NTS 2c: 13), (NTS 2e: 13), (NTECF 6, p.20).	1.1. identify the rules of writing a Ghanaian language through verbal and written responses. 1.2. describe the rules of writing a Ghanaian language through verbal and written responses. 1.3. apply the rules in writing a Ghanaian language through written responses.
	2. familiarize themselves with the Ghanaian language curriculum at the various levels. (NTS 2a:13), (NTS 2d:13)	2.1. identify the principles and rules of writing the Ghanaian language components of the curriculum 2.2. interpret the principles and rules of a Ghanaian language curriculum for the various levels
	3. work collaboratively, and under the guidance of their mentor, plan for and work with a small groups or individuals, showing some ability to consider children's backgrounds/experience in Ghanaian language learning. (NTS 1e: 12), (NTS 3f: 14), (NTECF p.42), (IEP 5.1.1.1.a: 11)	3.1. work in positive collaboration with mentors, colleagues as part of their community of practice 3.2. employ strategies that show individual needs/strengths of the learners are considered
	4. demonstrate knowledge and skills in teaching principles and rules in the Ghanaian language. (NTS 3e, g, i: 14), (NTS 3f, g: 14), (NTECF, p. 43)	4.1. employ appropriate various teaching and learning strategies in classroom 4.2. use appropriate teaching strategies to cater for learners with different backgrounds
	5. demonstrate knowledge and skills in assessing principles and rules in the Ghanaian language. (NTS 3o: 14), (NTS 3k,p:14), (NTECF, p. 43-44)	5.1. show their awareness of the existing learning outcomes of learners 5.2. show integration of modes of assessment of learner in teaching and learning principles and rules of a Ghanaian language
	6. prepare appropriate TLMs for teaching principles and rules of the Ghanaian language. (NTS 3j: 14), (NTS 3j: 14), (NTECF, p.29, 43)	6.1. design appropriate TLMs for teaching principle and rules of writing Ghanaian language 6.2. use appropriate TLMs in teaching and learning principles and rules of writing a Ghanaian language

	7. interpret the principles and rules component of the Ghanaian language curriculum. (NTS 2c: 13)		7.1. know, understand, and explain the Ghanaian language component on principles and rules writing	
Course Content	Units:	Topics: 1. Concept of orthography of a Ghanaian language	Sub-topics (if any): 1. Letters of the alphabet 2. Speech sounds 3. Dialectal variations in writing	Suggested Teaching Learning Activities to achieve Learning Outcomes: 1. Discussion to engage student teachers in active participation 2. reflection on matching letters of alphabet with speech sounds 3. brainstorming on the dialectal factors that influence standardisation of orthography
		2. Distribution of a Ghanaian language speech sounds	1. Vowels 2. Consonants	1. Discussion on identification and articulation of vocalic inventory 2. Individual/group presentation of vowel and consonant combinations. The groupings and the selection of the leaders of the group should pay particular attention to communication issues such as SENDs, gender, mixed abilities, inclusivity, equity, etc.
		3. Principles of writing		1. Student teachers discuss convention of writing. Individual/group presentation. The groupings and the selection of the leaders of the group should pay particular attention to communication issues such as SENDs, gender, mixed abilities, inclusivity, equity, etc. Classroom observation on learners' writing paying attention to student teachers with visual challenges.
		4. Vowel harmony and writing		1. Student teachers discuss vowel harmonies. Classroom observation on harmony rules in writing paying attention to student teachers with visual challenges. Student teachers make individual/group presentation on types of harmony. The groupings and the selection of the leaders of the group should pay particular attention to communication issues such as SENDs, gender, mixed abilities, inclusivity, equity, etc.

		5. Assessing principles and rules of a Ghanaian language	1. Forms of assessment 2. How to assess principles and rules of a Ghanaian language	1. Class brainstorming on forms of assessment. Student teachers mention the forms of assessment they know. Student teachers peer assess their own work.
		6. Preparing TLMs for teaching the structure of a Ghanaian language	1. Selecting, designing and using of TLMs for teaching and learning the principles and rules of a Ghanaian language 2. Selection and use of textbooks as TLMs for teaching and learning the principles and rules of writing of a Ghanaian language	1. Student teachers actively participate in designing TLMs. Student teachers demonstrate the use of TLMs 1. Student teachers demonstrate the use of TLMs by students in class. Student peer assess their own choices of textbooks as TLMs
		7. Interpreting the principles and rules of a Ghanaian language component of the Ghanaian language curriculum		1. Student teachers reflect on their personal experiences in learning the principles and rules of writing a Ghanaian language. Student teachers discuss the component of the curriculum. Group presentations based on interpreting the component of the curriculum
		8. Methods of teaching the principles and rules of writing a Ghanaian language	1. Definition of method, approach, design, procedure, technique 2. Methods (grammar translation, audiolingual, situational approach/oral, direct approach, reading approach, community language learning, etc.)	1. Class discusses the methods of teaching the principles and rules of a Ghanaian language. Student teachers do demonstration teaching using the appropriate methods in teaching an aspect of principles and rules of writing a Ghanaian language. Student teachers peer assess their own teaching demonstrations.

		9. Preparation of a language principles and rules of writing lesson (learning) plan	1. Factors to consider when designing a language principles and rules of writing lesson plan 2. Components of a language lesson plan	1. Group presentations on designing various components of the language lesson plan. Student teachers do peer assess their own class presentations 2. Students demonstrate how to use a lesson plan to teach in class. Student teachers peer assess their own teaching.
Course Assessment (Educative assessment of, for and as learning)	**Component 1**: COURSEWORK Summary of Assessment Method: 1. Examination (for diagnostic purpose): It will comprise (i) selection tests, namely multiple choices, and (ii) supply tests such as fill-ins. Weighting 20% 2. Assignments: They will consist of 2 individual/group presentations and 1 group presentations. Weighting 20% **Total Weighting: 40%** Assesses Learning Outcomes: 1. Examinations (for diagnostic purpose): The examination will assess students against the following CLOs: 1, 4, 5, & 7. 2. Assignment: The assignments will assess the problem-solving skills and students' ability to identify and correct mistakes in Ghanaian language texts, and will address CLOs: 1 & 3.			
	Component 2: COURSEWORK Summary of Assessment Method: 1. Class participation: It will comprise records on students' active participation in class in terms of contributions to lessons and class activities. 20 % 2. Demonstration: It will involve assessment of student teacher's ability to demonstrate enthusiastically their knowledge and skills in applying rules in writing a Ghanaian language. Weighting 20% **Total Weighting: 40%** Assesses Learning Outcomes: 1. Class participation: It will assess students' active participation in class in terms of contributions to lessons and class activities. This will address CLOs 1, 2, 3, 4, 5, 6, & 7. 2. Demonstration: It will assess students' ability to demonstrate enthusiastically their knowledge and skills in applying rules in writing a Ghanaian language, which addresses CLOs 4, 5, 6, & 7.			

	Component 3: COURSEWORK Summary of Assessment Method: 1. Student Reflective Journal: It will be based on classroom observation by student teachers. Weighting 10% 2. Professional Portfolio: It will consist of mentor's assessment comments, students' presented works, checklist for learning outcomes. Weighting 10% **Total Weighting: 20%** Assesses Learning Outcomes: 1. Student Reflective Journal: It will assess student teacher's reflection on classroom observation on the application of the principles and rules of writing Ghanaian language. This addresses the CLO 3. 2. Professional portfolio: It will assess students' ability to organise himself or herself as s/he develops professionally. This will address CLOs 6.
Instructional Resources	1. Language Laboratory 2. tape recorder 3. magnifying glass
Required Text (Core)	Coulmas, F. (1991). *The Writing Systems of the World*. London: Wiley-Blackwell.
Additional reading list for Ga	Ablorh, R. J. (1961). *Ga Wiemɔ komekomei Ni Abua Naa Kɛ Wiemɔŋmaa Okadii lɛ Atsaramɔ he Mlai*. London: MacMillan. Akpanglo-Nartey, J. N. (1989). *A phonetics course for Non-natives Speakers of English* (2nd ed.). Tema: Sakumo Books. Akpanglo-Nartey, J. N. (1989). *An introduction to linguistics for non-natives speakers of English*. 2nd ed). Tema: Sakumo Books. Catford, J. C. (1994). *A practical introduction to phonetics*. Oxford: Clarendon Press. Kropp-Dakubu, M. E. (2002). *Ga phonology:* Language monograph (Series No. 6). Accra: Institute of African Studies, University of Ghana, Legon. Peter, R. (2000). *English Phonetics and Phonology*. 3rd Edition. Cambridge.
Additional reading list for Dangme	Abedi-Boafo, J. (1967). *Dangme Nyaii*. Accra: Bureau of Ghanaian Languages. Accam, T. N. N. (1977). *Dangme Munyu Tulɔ*. Accra: Bureau of Ghana Languages. Accam, T. N. N. (1967). *Klama Songs and Chants*. Accra: Institute of African Studies.

	Akpanglo-Nartey, J. N. (1989). *A phonetics course for non-natives speakers of English* (2nd ed.). Tema: Sakumo Books. Asante, A. L. (1980). *Ke mawu gbi mo ɔ*. Accra: Bureau of Ghana Languages. Catford, J. C. (1994). *A practical Introduction to Phonetics*. Oxford: Clarendon Press. Kropp Dakubu, M. E. (1988). *The Dangme language*. Accra: Unimax. Puplampu, D. A. (1953). *Dangme munyu tubɔ*. London: MacMillan and Co. Ltd.
Additional reading list for Nzema	Annan, J. C. (2014). *Analysing and using English. A handbook of English grammar for students as a second language*. Accra: Luckyfour Publisher. Essuah, J. A. (1965). *Nzema grammar*. Ibadan: Claverianum Press. Kwaw, E.F. (2008). *Nzema Aneɛmɛla Tagyee Ne*. Accra: Paul Unique Printing Works Warriner, J. E. (1982). *English grammar and composition*. Orlando: Harcourt Brace Jovanovich Inc.
Additional reading list for Fante	Abakah, E. N. (1998/9). On the question of standard Fante. *Journal of West African Languages,* 27(1), 95-115. Bureau of Ghana Languages. (1996). *Mfantse Nkasafua Nkyerɛwee*. Accra: BGL. Bureau of Ghana Languages. (1996). *Unified Akan Orthography.* Accra: BGL. Tetteh, E. K. (2003). *Mfantse Kasasua Mbra mu Bi***.** Tema: Ghana Publishing Corporation
Additional reading list for Twi	Agyekum, K. (2010). *Akan Kasa Nhyehyɛeɛ*. Accra: Dwumfour Ghana Limited. Akrofi, C. A. (2011). *Twi Kasa Mmara*. Accra: Waterville Publishing House. Akrofi, C. A. & Ludwig, R.E. (1951 revised ed.). Twi nsɛm nkorɛnkorɛ kyerɛwbea (Twi Spelling Book) (revised ed.). Accra: Waterville Publishing House. Bureau of Ghana Languages. (1996). *Unified Akan Orthography.* Accra: BGL. Christaller, J. G. (1933). *Dictionary of the Asante and Fante language called Tshi (Twi)* (2nd ed.). Basel: Basel Evangelical Missionary Society. Dolphyne, F. A. (2006). *The Akan (Twi-Fante) Language: Its sound system and tonal structure.* Accra: Woeli Publishing Services. The Bible Society of Ghana. (1964). *The bible in Twi: Asante (Twerɛ Kronkron Asante)*. Accra: Bible Society of Ghana. The Bible Society of Ghana. (1964). *The bible in Twi: Akuapem (Kyerɛw Kronkron Akuapem)*. Accra: Bible Society of Ghana.
Additional reading list for Ewe	Amegashie, S. K. (2008). *Eʋegbe fe tutuɖo (Writing Ewe).* University of Education, Winneba. Atakpa, F.K. (2003). Gbeɖaŋu na Eʋegbewɔlawo. Accra: Woeli Publishing Services. Duthie, A. (1996). *Introducing Ewe linguistic patterns*. Accra: Universities of Ghana Press. Obianim, S. J. (1999). *Eʋegbe ŋuti nunya Akpa I.* Accra: SEDCO Publishing Limited. Nyomi, C.K. (1977). *A study of Ewe word structure and usage for beginners I*. Cape Coast: University of Cape Coast.
Additional reading list for Dagaare	Bodomo, A. B. (2004). *A Dagaare-Cantonese-English lexicon for lexicographical field research training*. Cologne: RudigerKoppeVerlag.

	Bodomo, A. (2000). *Dagaare*. Muenchem: Lincom Europa. Bodomo, A. B. (1997). *The structure of Dagaare*. Stanford: CSLI Publications. Bodomo, A. B. (1989). *A study of dialectal variation in Dagaare*. MA. Dissertation. Department of Linguistics, Legon. Kropp-Dakubu, M. E. (1997). *Dagaare language grammar*. Accra: Institute of African Studies. Saanchi, J. A. (1997). The vowel system of Dagaare." *Gur Papers/Cahier Voltaïques 2, 129-135.* Schaefer, P. & Schaefer, J. (2003). *Collected field report on the phonology of Safaliba.* Accra: Institute of African Studies.
Additional reading List for Kasem	Awedoba, A. K. (1993). *Kasem Studies Part 1*. Accra: Institute of African Studies, University of Ghana. Danti, A. L. (2006). *Kasem Taanemɔɔnem Seina*. Winneba: De-miska. Kasem Language Committee. (1997). *Kasem Orthography*. Accra: Bureau of Ghana Languages. Lugogye, R. B. (2005). Writing Difficulties of Learners of Kasem: A case study of the performance of students of Kasem at the University of Education, Winneba. M.Phil thesis, University of Education, Winneba. Lugogye, R. B. (2010). On the question of quality or length: Kasem vowels in perspective. *Journal of African cultures and Languages*, 1 (1), 136-145. Lugogye, R. B. (2013). Matching the symbol with the message: emerging challenges in Kasem writing. *Journal of African Cultures and Languages*, 1 (2), 154-165. Wedjong, S. P. (1969). *Westoŋa Memaŋa Kwɛɛra.* Accra: Bureau of Ghana Languages. Wedjong, S. P. (1975). Kem Laarochoŋa. Accra: Bureau of Ghana Languages.
Additional reading List for Kusaal	Awimbila, M. (2012). *Kusaal reading and writing made easy*. Tamale: GILLBT. Kusaal Orthography Committee. (2013). *Kusaal orthography.* Tamale: GILLBT Musah, A. A. (2010). Aspects of Kusaal phonology. MPhil thesis, University of Ghana, Legon. Naden, T. (2012). *Kusaal lexicon*. Tamale: GILLBT Sandow, W. A. & Anaba, J. A. H. (1980). *Kusaas Yir Nɛ KuobYelaGbauŋ.* Tamale: GILLBT. Spratt, D. & Nancy (1968). Collected field reports on the phonology of Kusaal.
Additional reading list for Gurenɛ	Dakubu, M.E.K, Atintono, S.A. & Nsoh, E. A. (Eds). (2007). *Gurenɛ-English Dictionary with English-Gurenɛ Glossary.* Vol. 1. University of Ghana, Legon: Department of Linguistics. Dakubu, M. E. K, Atintono, S. A. & Nsoh, E. A. (Eds). (2007). *Gurenɛ-English dictionary with Gurenɛ-English glossary.* Vol. 1. Legon: Department of Linguistics, University of Ghana, Legon. GULDA. (2001). *Gurenɛ Guleseyiŋɔ Sɔa la Yelebɛa Tigere*. Legon: Akurugo Publications.
Additional reading list for Gonja	Afari-Twako, K. H. (2001). *AlɔntorwornɛNgbarbembra.* Tamale: Cyber Systems. Collin, P. (1970). *A phonological and grammatical analysis of Gonja*. London: Indiana University Press. Gonja National Orthography Committee. (2014). *Gonja orthography.* Tamale: Ghana Institute of Literacy, Linguistics and Bible Translation (GILLBT). Hefferman, J. A. W. & Lincoln, B. (2010). *Writing: A college handbook (3rd Ed)*. New York: W. W. Norton & Co. New York.

Additional reading list for Dagbani	Abubakari, B. S. (1980). *Notes on Dagbani grammar*. Ajumako: School of Ghana Languages. Abubakari, B. S. (1977). *The sound system of Dagbani*. Diploma dissertation, University of Ghana, Legon. Andani, R. I. (1989). *Paɣ'KpuɣiboDagbɔŋPul' Ni*. Accra: Bureau of Ghana Languages. Dagbani Orthography Committee. (1998). *The approved Dagbani orthography*. Dalon: DANIDA. Olawsky, K. J. (1999). *Aspects of Dagbani grammar*. Munich: LINCOM

English

CONTEXT

Literature plays a key role in language learning but it is de-emphasised in the educational system. Most language teachers think literature is for the higher levels. There is the misconception that literature is difficult and belongs to learners at the advanced level in education (JHS and SHS). Literature develops in learners in the Upper Primary's love and passion for life-long reading, develop cognitive skills and nurtures growth and development of learners' personality and social skills but these values are lost because we do not teach our learners literature at Upper Primary level. This is so because teachers are not trained to teach literature at the Upper Primary level. In addition, there are not enough literature materials in schools. In a nutshell, literature is neglected in Upper Primary. There is therefore the need to train teachers who can teacher literature to make their learners appreciate it in their learning process.

Course Title	**Introduction to English Literature**						
Course Code		**Course Level: 200**	**Credit value: 3**				**Semester 2**
Pre-requisite	Introduction to English Language						
Course Delivery Modes	✓ **Face-to-face**	✓ **Practical activity**	✓ **Independent Study**	✓ **Work-based learning**	✓ **Seminar**	✓ **E-learning Opportunities**	**Practicum**
Course Description	This course introduces all student teachers to English literature. The course covers the three main genres of literature - prose, poetry and drama. The purpose of the course is to equip student teachers with the tools and skills that are needed to interpret and analyse different literary texts. The course will examine language as an artistic medium with aesthetic principles that shape not only literary works, but also embody core values and principles such as honesty, truthfulness and respect. The structures, types and forms of the different genres of literature will also be highlighted. The introduction to each genre will be followed by a practical analytical and interpretation component using different texts. The course is designed to equip student teachers with literary skills to enable them to teach literature knowledge to their pupils, and to teach them how to apply this knowledge in their reading, interpretation and analysis of literary texts. Teaching strategies such as discussion, brainstorming, group work will be used to deliver the course. Modes of assessment of learning, as learning and for learning will include: presentations, performances, dramatization, recitals, role-play, writing exercises, text analysis, group-based projects and text reviews (NTECF p.16, 24, 25, 26; NTS3k: 14).						

Course Learning Outcomes	Learning Outcomes: On successful completion of the course, student will be able to	Indicators
	1. Demonstrate basic knowledge and understanding of English Literature	• Define Literature • Identify and differentiate • between the various forms/genres of literature • Explain the characteristics • of the different forms/genres of English literature
	2. Demonstrate knowledge and understanding of the elements of the major genres of English literature	• Identify and explain the elements of • poetry • Identify and explain the • elements of prose • Identify and explain the • elements of drama
	3. Apply the knowledge and understanding acquired in literature to analyse given literary texts	• Interpret and analyse a poem with respect to the use of imagery, rhyme, rhythm, sound devices and figurative language • Interpret and analyse prose • texts with respect to plot, point of view, theme, and • character (- isation) • 3.3 Explain and analyse a dramatext with respect to plot, action, character (-isation) anddramatic techniques.
	4: Use appreciation of literature as lense through which to connect values to human nature and human situation.	• Connect literary works and real life experiences • Exhibit values such as honesty, truthfulness and respect in their dealings with colleague student teachers and others, and in their presentations ofassignments and projects.

Course Content	Units	Topics:		Teaching and learning activities to achieve learning outcomes
	1	Introduction to literature	Introduction to literature 1. Definitions and forms ✓ Genres of literature - Oral Literature ✓ Characteristics of prose/poetry/drama	• Discussion of the definitions and forms of literature • Identification of different forms of literary works (poem, prose, drama) • Illustration of oral literature from student teachers' own socio-cultural contexts. • Use of technology to exemplify different genres of literature as they occur in real life.
	2	Introduction to Poetry	What is poetry? Form and Structure of Poetry Types of poetry Narrative Poems Lyrical Poems Didactic Poems Descriptive Poems Elements of Poetry Imagery Rhyme Rhythm Stanza Tone Figurative language Sound Devices	• Discussion of the definitions, forms and types of poetry • Identification of elements of poetry in sample poems • Use of ICT tools, where necessary, to find examples of different forms and types of poetry. • Performance of different poems in class. • Conducting internet-based research for sample poems

	3	Interpretation and analysis of poetry	recommended texts	Povision of sample texts of poetry Interpretation and analysis sample poems (with respect to the use of imagery, rhyme, rhythm, sound devices and figurative language)
	4	Drama	What is Drama? Nature of Drama Types of Drama • Comedy • Tragedy • Tragi-comedy Elements of Drama • Character • Plot • Action • Setting • Theme • Dialogue Dramatic Techniques • Suspense/foreshadowing • Comic Relief/Flash back/Dramatic Irony	• Description of the nature of drama • Illustration of different types of drama with short stories • Explanation of the elements of drama • Identification of elements of drama in the sample texts • Watching selected drama episode (s) on television and discussing observations and experience in class
	5	Interpretation and analysis of Drama	Recommended texts	Interpretation and analysis of sample drama texts (with respect to plot, action, character(ization) and dramatic techniques)

	6	Prose –Fiction	What is Prose? What is Fiction? Types of Fiction • Novels • Mystery • Detective Stories • Romance • Short Stories • Historical Fiction Characteristics of Prose fiction Types of Prose fiction • Fable/ Allegory/ Romance ✓ Short story/Novella/ The Novel Elements of Prose • Plot • Theme/Subject Matter • Character and characterisation • Point of view • Mood • Setting Literary terminology	• Explanation of the definitions and types as well as characteristics of prose-fiction • Explanation of the elements of prose-fiction and literary terminologies. • Reading and identification of elements of prose-fiction in sample texts

	6	Prose: Non-Fiction	Essays Autobiographies Biographies Travel and Adventure Criticisms Speeches Journal Articles	• Discussion of the differences between fiction and non-fiction prose • Illustration of the types and characteristics of non-fiction prose • Reading of different non-fiction prose texts • Encouragement of student teachers to identification of the difference among them.
	7	Interpretation and analysis of Prose (fiction and Non-Fiction)		Presentations (student teachers to give group presentations based on their interpretation and analysis of prose texts (with respect to plot, point of view, theme, character (-ization) etc.)
Course Assessment	**Component 1: Group work - Assessment as/of learning (40%)** Students (in groups) to adapt a prose text into a drama text and perform it (CLOs 2, 3). Core Skills: Creativity, innovation, critical thinking, team work and collaboration **Component 2: Independent work - Assessment for learning (30%)** Student teachers to either perform selected poems in class or watch a drama production/performance and write a brief critique that analyses elements of drama (CLO 3). Core Skills: Creativity, analysis and evaluation, critical thinking **Component 3: Written Examination- Assessment of learning (30%)** A written examination that will test student teachers'knowledge and understanding in the types, forms/structure, characteristics, similarities and differences among poetry, drama and prose (CLOs 1, 2). Student teachers to be observed as they work in teams to ascertain whether or not they demonstrate values such as honesty, respect for one another, tolerance and truthfulness (CLO 4). (CoreSkills targeted: Knowledge, critical thinking)			
Instructional Materials	Books (poetry, drama, prose texts), television set, computer (YouTube videos/audios).			
Required Text (Core)	Abram, M. A. (1999). *A glossary of literary terms*. Boston: Cencage Learning. Gyasi, I. K. (1988). *Ordinary level English literature*. Tema: Ghana Publishing Company. Senanu, K. E. & Vincent, T. (1976). *A selection of African poetry*. London: Longman.			

Additional Reading List	Cook, D. (1977). *African literature: A critical view*. London: Longman. Eghagha, H. (2001). Introduction to drama In *The English compendium*. Lagos: Department of English, Lagos State University. Meyer, M. (2010). *Bedford introduction to literature: Reading, thinking, writing*. Bedford: St Martins. Moody, H. (1972). *The study of literature*. London: George Allen & Unwin.

Mathematics /Numeracy

CONTEXT

Over the last two decades, official reports have consistently identified a problem regarding how mathematics is taught and learnt in Ghanaian schools. Teachers often tend to present mathematical concepts, work several examples on the chalkboard, and then assign exercises in which pupils practise whatever has just been presented; an approach that has been widely criticised. Although, the current teacher education programmes attempt to expose student teachers to theories on how children learn mathematics, it would appear that the emphasis is on cognitive and the behaviourist perspectives of children learning, regardless of contemporary understanding on socio-constructivism and situated cognition theories as well as teacher beliefs about the mathematics and its teaching and learning. Teacher beliefs, for example, do not only affect the way they teach, but also what and how their pupils learn. A belief that mathematics should be focused on engaging tasks that encourage critical thinking and problem solving leads to teachers developing lessons that promote discourse between students and making sense of concepts and procedures-deepening understanding of mathematical concepts.

To address the foregoing issues, this course is designed to provide a comprehensive overview of various theoretical and philosophical approaches used to better understand the teaching and learning of mathematics, with a focus on the early years' level. In early years, mathematics will be 'cross-curricular' and through the use of concrete materials and a kinaesthetic approach including number rhymes, songs and games. The readings and assignments in this course will allow for insight into the existing evidence accumulated on teaching and learning mathematics and inspire reflective thoughts on the emerging thinking around how children learn mathematics at the early years. Specific attention is given to the definition and importance of mathematics; teacher beliefs about learning and teaching mathematics; the nature of teacher mathematical knowledge; making connections and developing mathematical talk; meaning and scope of development; theories of teaching Upper Primary students: behaviourists, cognitivists and constructivists; implications for teaching mathematics in the early years; socio-cultural, attitude, anxiety, and other teaching mathematics involving the concepts of inclusivity and equity from reflective perspective.

Course title:	**Theories in the Learning of Mathematics for Upper Primary**						
Code:	**Course Level: 200**		**Credit Value: 3**		**Semester 1**		
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Pre-requisite	**N/A**						
Course Description with significant learning	This course focuses on developing an understanding of what we know about how people think about mathematics and how an understanding of mathematics develops. It provides an overview of philosophies of mathematics and teaching mathematics in the early years and explores the underlying conception about mathematics in the official mathematics curriculum and current classroom practice. It also covers how children learn mathematics and associated theories, and other psychological factors influencing learning. A number of learning theories that provide theoretical underpinnings for the use of ICTs in education will be examined with examples of ICT use based on each of the theories examined. Additionally, student teachers will develop awareness of equity and diversity issues, especially in respect of being able to identify the main developmental milestone of children in the early years as well as the development of gender role and awareness. The course is expected to help student teachers learn how to teach mathematics and possibly construct their professional identities by reflecting and making connections between theory and practice. The course will focus on teachers as mediators and looking at students' characteristics as potential barriers to learning. It will inform and improve student teachers' knowledge of foundational and contemporary theories and practices in teaching and learning mathematics at early years, and can help them to consider effective classroom practices as they begin to think about how to plan and teach mathematics lessons in the early years. The learning outcomes would be assessed through a combination of formative and summative assessments including coursework, individual and group assignments, presentations and mathematics histories(NTECF, p. 21, 45; NTS 1a, 2c, 2e)						

Course Learning Outcomes (CLOs) with indicators	Outcomes	Indicators
	On successful completion of the course, the student teacher will be able to: 1. demonstrate understanding of different beliefs and values of mathematics (NTS 2c; NTECF 21)	• Describe conceptions about mathematics implicit in student teachers' own beliefs; • Compare conceptions about mathematics implicit in student teachers' beliefs, the official early years mathematics curriculum, and current classroom practice in teaching mathematics; • Discuss the influence of the teacher's values and conceptions of mathematics on students' learning; • Develop a short personal beliefs about the teaching and learning of mathematics
	2. Demonstrate understanding of the theories that are applicable to learning mathematics at the early years (NTS 2e; NTECF 21)	• Explore key theories about how children learn mathematics at the early years including Sociocultural, Activity Theory, Situated Cognition, Cognitive and Constructionism perspectives • Outline the significance of, differences in and criticisms of these theories their implications to classroom practice • Discuss different ways and pace to learning mathematics • Use their knowledge of individual differences to explain how classroom environment can be managed to engage and motivate all learners to achieve and maintain acceptable levels of knowledge and skills in numeracy. • Demonstrate awareness of socio-cultural issues in teaching and learning mathematics in the content domains
	3. Demonstrate an understanding of relevant professional values and attitudes in teaching early year mathematics (NTS 1a, 1f; NTECF p. 21)	• Show a caring attitude towards learners and always ready to support those who have misconceptions or struggle with the subject by empathising, encouraging, providing support, modelling, etc. • Reflect critically on their own learning experiences and teaching and use the notes to plan for continuous personal development • Develop value as well as respect equity and inclusivity in the mathematics classroom

Course content	Unit	Topics	Subtopics	Teaching and learning activities to achieve learning outcomes
	1	Why do we teach mathematics in school?	Definition and importance of mathematics to the early year teacher How does mathematics relate to society What it means to learn and to teach mathematics;	Use of verbal exposition, peer discussions and presentations, anecdote/case studies on the importance and the nature of mathematics and how mathematics relate to society
	2	Teacher beliefs about mathematics and their relation to teaching	Teacher's beliefs and attitudes about mathematics and its learning and teaching at early years Making connections between teacher beliefs and practice and developing mathematical talk/discussion	Use of verbal exposition, peer discussions and presentations, anecdote/case studies on teacher's beliefs and attitudes about learning and teaching early years mathematics, making connections between teacher beliefs and practice and developing mathematical talk/discussion
	3	Beliefs underlying the current early years official curriculum and inclusive classroom practices	• Nature of Upper Primary mathematics curriculum • Assumptions • Implication for classroom practice relating to: – the concepts of inclusion and equity from a reflective perspective – understanding learning difficulties in mathematics e.g. dyscalculia, dyslexia	Peer discussions and presentations on the nature of Upper Primary mathematics curriculum and assumptions Verbal exposition, peer discussions and presentations, anecdote/case studies involving the concepts of inclusion and equity from a reflective perspective as well as learning difficulties in mathematics. Research-based learning including fostering a Growth Mind-set (Dweck)
	4	Major theories of learning and teaching of early years mathematics in inclusive classrooms	• Socio-cultural perspectives • Activity theory perspective • A situated cognition perspective • Cognitive perspectives • Constructionism • Implications for practice	Use verbal exposition, discussions, peer presentations, research findings major theories of learning and teaching of early years mathematics Corporative and collaborative group work, outlining the key implications of the

				perspectives for learning, teaching curriculum and assessment.
	5	Multiple intelligence and Upper Primary mathematics	• Multiple intelligence theory • Implications for teaching and assessment of mathematics in inclusive classrooms in the early years	Student-teacher led seminar sessions and peer teaching on the implications for teaching mathematics in the early years
	6	Factors that affect teaching and learning mathematics in the early years	• Socio-cultural, attitude, anxiety, and other affective factors. • The importance of mathematics vocabulary	Use verbal exposition, student-teacher presentations on socio-cultural, attitude, anxiety, and other affective factors regarding teaching early years mathematics in inclusive classrooms
Course Assessment	**Modes of Assessment of Indicators**			
	COMPONENT 1: Examination **Summary of Assessment methods:** Students should be summatively assessed by an examination linked to the themes listed below • the range of theories on how children develop • the psychological basis for teaching mathematics at junior high school level • psychological basis for teaching mathematics at junior high school level • relevant professional values and attitudes for teaching mathematics at junior high school level **Weighting: 40%** **Assesses Learning outcomes: CLO 1-4 (NTS 2c)**			
	COMPONENT 2 : Coursework 1 **Summary of Assessment methods:** Individual Assignments with Presentations: Students teachers may be asked to write an essay to • explain the influence of the teacher's values and philosophies of mathematics on students' learning; • describe philosophies of mathematics implicit in their beliefs • compare philosophies of mathematics implicit in the official mathematics curriculum and current classroom practice in teaching mathematics • explain why and how children learn numeracy in different ways and pace • explain how classroom environment can be managed, using knowledge of individual differences, to engage and motivate all learners to achieve and maintain acceptable levels of knowledge and skills in numeracy			

	Or Group Assignments with Presentations: Students teachers should be given an assessment tool or questionnaire to • assess philosophies of mathematics implicit in their beliefs, (questionnaire may include open ended item to elicit students teachers' beliefs through autobiographies, mathematics histories etc.); work in groups to compare philosophies of mathematics implicit in their beliefs, do group reports and presentations • assess philosophies of mathematics implicit in the official mathematics curriculum and current classroom practice in teaching mathematics; do group reports and presentations **Weighting: 40%** **Assesses Learning outcomes**: CLO 1 (NTS 2c)
	COMPONENT 3: Coursework 2 **Summary of Assessment methods:** Self-Assessment (as part of their portfolio): Students teachers should be given an assessment tool or questionnaire at the onset and the end of the course to • do self-assessment and compare their attitude towards learners, mathematics teaching and readiness to support learnerswho have misconceptions or struggle with the subject (do group reports and presentations) • do self-assessment and compare their value as well as respect for equity and inclusivity in the mathematics classroom (do group reports and presentations) • reflect critically on their own learning experiences and use them to plan for their own continuous personal development • develop their theoretical and philosophical perspective of teaching **Weighting: 40%** **Assesses Learning outcomes**: **CL 3 (NTS 1a, 2f)**
Teaching/ Learning Resources	i. Maths posters; ii. Journal articles and position papers iii. Manipulatives and visual aids iv. Computers
Required Text (Core)	Ministry of Education (in print). *Primary school mathematics standards*. Accra: Ministry of Education

Additional Reading List	National Council of Teachers of Mathematics. (2000). *Teaching and learning principles: Principles and standards for school mathematics*, pp. 16-21. Ernest P. et al. (2016) The philosophy of mathematics education. In *The philosophy of mathematics education. ICME-13 topical surveys*. New York: Springer, Cham Ernest, P. (1992). The nature of mathematics: Towards a social constructivist account. *Science and Education*, 1(1), 89-100. Ernest, P. (2004a). *The philosophy of mathematics education*. Taylor and Francis e-Library (Adobe e Reader Format).Available: *http://p4mriunpat.files.wordpress.com/2011/10/the-philosophy-of-mathematics-education-studies-in mathematicseducation.pdf.* Ernest, P. (2004b). What is the philosophy of mathematics education? Philosophy of Mathematics Education Journal, 18. Retrieved from *http://people.exeter.ac.uk/PErnest/pome18/PhoM_%20for_ICME_04.htm*.

Science

CONTEXT

Several interventions have been initiated by government to promote the teaching and learning of science in schools, as science is the gateway to industrial and technological growth. There are numerous challenges faced by primary science education which includes the need for science equipment and also qualified science teachers who are trained to integrate ICT into the teaching and learning process.

There is also a need for a conducive learning environment for a section of the early adolescent population who have the conception that STEM subjects are for boys rather girls.

The learning activities for this semester seeks to relate science to the learners' environment, make science culturally relevant and inclusive. It also seeks to promote professional scientific attitudes and skills development such as critical thinking, honesty, patience, sincerity, precision, and accuracy. Sensitive concepts may be explained within the appropriate local dialect and/or practices, in order to remove barriers that could prevent students of diverse abilities and strengths from participating in any science lesson, as well as managing transition from early childhood (B3) to middle childhood (Upper Primary).

Course Title	**Integrated Science I for Upper Primary**						
Course Code		**Level 200**	**Credit value: 3**		**Semester 1**		
Pre-requisite	Successful Completion of Year one Integrated Science						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminars** ☐	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description	The course for semester one of year two uses the universal design for learning approach to extend the basic science concepts of the student teacher on the following content areas: groups of plants, group of animals, metals and non-metals, rusting, measurement of temperature, ventilation and psychology of early adolescent learner and science teaching and learning. This is done through appropriate pedagogies such as Talk for learning approaches, demonstrations, concept mapping, problem-based teaching /learning, and video presentations as well as authentic assessments mode such as concept mapping, using checklist to identify values and attitudes and, mind maps from which provides for the teachers' attention on the need to ensure equity and the provision for SEN. This course continues to emphasize on the essential attitudes and values of professional science teaching such as honesty, carefulness and accuracy. The student teacher, in this course, should be introduced to issues of transition in terms of use of the English language as medium of instruction and characteristics and learning styles of early adolescent Supported Teaching in School (STS), as well as managing transition from early childhood (B3) to middle childhood (Upper Primary) (NTS, 2e, p.13), (NTS, 1a-c, p. 12), (NTS, 2c, P. 13).						

Course Learning Outcomes	Outcomes On successful completion of the course, Student teachers will be able to:	Indicators
	1. Classify plants and animals into various types according to their characteristics and discuss the uses of plants and animals **(**NTS 2c, p.13 & 21)	• Produce a chart on different types of plants and animals based on their characteristics • Present reflective report on the uses of plants and animals
	2. Distinguish between metals and non-metals (NTS 2c, p.13 & 21)	• Produce a chart on metals and non-metals with write up on differences between metals and non-metals
	3. Recognize that some metals and objects made from iron when exposed to moisture in the presence of air will form rustand explain the effect of rusting on iron and demonstrate methods of preventing rust(NTS 2c, p.13 & 21), (NTS 2c, p.13 & 21)	• Write up to explain factors that cause iron rust. • Provide pictures on effects of rust from the environment. • Prepare and submit a chart on different methods of preventing iron rust.
	3 Measure body temperature using mercury in glass thermometer, convert degree Celsius to degree Fahrenheit and Discuss everyday applications of ventilation and convention current.(NTS 2c, p.13 & 21), (NTS 2c, p.13 & 21), (NTS2b, p.12, 2c, p.13 & 21)	• Produce a chart showing measurements of body temperature of colleagues. • Present conversion table for degree Celsius and degree Fahrenheit. • Report on everyday applications of ventilation and convention current in our homes.
	5 Demonstrate values (such as critical thinking patience, precision, accuracy, honesty and orderliness), identified issues on pupils' transition from Upper Primary to upper primary and characteristics and learning styles of early adolescent and Identify misconceptions/incorrect scientific ideas about science concepts (NTS 2c, p.13 & 21), (NTS 2c, p.13 &21	• Present checklist that can be used to use to identify the values of accuracy, honesty, precision, patience and orderlies. • Produce report on how issues of transition are handled and characteristics and learning styles of early adolescent. • Explain natural phenomenon using scientific knowledge relating to the concepts in the course.

Course Content	Units	Topics:	Sub-Topics (if any):	Teaching and Learning activities to achieve learning outcomes
	1	**Groups of plants and animals**	1.1 Group of plants: erect, creeping and climbing 1.2 Root system of plants 1.3 Characteristics of leaves, and stem and Uses of plants	1.1.1 Nature walk and collect different plants 1.2.1 Nature walk and collect roots of plants 1.3.1 jigsaw puzzles and matching/mapping 1.3.2 mixed ability/gender based group presentation and discussion

			1.4 Grouping of animals based on movement and living space	1.4.1 Nature walk to observe animals with different movement and habitats and use observation to classify the animals observed
			1.5 Body covering of animals	1.5.1 Use open-ended questions to elicit student teachers' knowledge of body coverings animals and uses of animals
			1.6 Uses of some animals, pets and care of pets	1.6.1 Brainstorm to come out with meaning of pet and uses and care of pets in an inclusive, multi-grade, and developmentally appropriate classrooms

	2	**Metals, non-metals and rusting**	2.1 Types of materials 2.2 Classification of materials into metals and non-metals 2.3 Characteristics of metals and non-metals 2.4 Uses of metals and non-metals 2.5 Meaning of rust 2.6 Causes, effects and cLearning of rust fromsurface of iron and methods of preventing rust: painting, oiling or greasing; insolating the surface of iron from air	2.1.1 Build stock of materials (metals and non-metals). 2.2.1 Matching materials into metals and non-metals in groups (ensure that different abilities and strengths/needs are catered for to ensure a safe working environment and equal opportunities). 2.3.1 Practical activities to identify and describe characteristics of metals and non-metals. 2.4.1 Brainstorm student teachers to come out with uses of metals and non-metals in amixed ability/gender based group discussion. 2.5.1 In a mixed ability/gender based group brainstorm to come out with the meaning of rusting 2.6.1 Collect and examine metal objects for signs of rust and carry out activities to determine causes of rusting; discuss effects of rusting of iron materials 2.6.2 Brainstorm to come out with methods of cLearning and preventing rustingin an inclusive, multi-grade, and developmentally appropriate classrooms
	2	**Measurement**	2.1 Temperature: Meaning of temperature and units of temperature, reading temperature on analogue and digital thermometers, handling and using thermometers 2.2 Misconceptions about temperature, physical measure (Area/volume of plane figures, Mass/weight).	2.1.1 Brainstorm to come out with the meaning and units of temperature 2.1.2 Use practical Activities on reading temperature on analogue and digital thermometers 2.2.1 Practical activity on how to handle and use thermometers 2.2.2 Questioning approach to identify misconceptions and naive ideas on temperature

				2.2.3 Use practical activities to measure area, volume of plane figures and mass and weigh in a mixed ability/gender based group. 2.2.4 Student teachers to research online resources for use of appropriate scientific vocabulary
	3	**Ventilation**	3.1 Meaning of convection 3.2 Convection current 3.3 Ventilation and convection current 4.2 Applications of convection (sea breeze, land breeze, air conditioning, fridge, chimneyand ventilation of rooms) and causes of poor ventilation	4.1.1 Brainstorm to come out with the meaning of convection (ensure that different abilities and strengths/needs are catered for to ensure a safe working environment and equal opportunities). 3.3.1 Use mind maps and shower thoughts to explain ventilation in terms of convection current. 4.3.1 Shower thoughts/discussions on applications of convection discuss why and how rooms should be ventilatedin an inclusive, multi-grade, and developmentally appropriate classrooms. 4.2.1 group activities to plan and develop ways of increasing ventilation in our homes and classrooms and discuss causes of poor ventilation (ensure that different abilities and strengths/needs are catered for to ensure a safe working environment and equal opportunities).

	4	Psychology of early adolescent learner and science teaching and learning	4.1 Characteristics of early adolescent and learning styles and integrated science teaching and learning. Through this experience student teacher will be working towards meeting the NTS.	5.1.1 Talk for Learning Approaches/Discussions /Student Teacher presentations on characteristics and learning styles of adolescent learner important for integrated science teaching and learning 5.1.2 School experience project- Student teachers will evaluate teaching learning materials used in teaching science concepts for inclusion/diversity and vocabulary during school observation and report it in the SRJ
Course Assessment	**Component 1**: Summative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Quizzes/Exams/Report writing/Poster/Presentations/ Professional portfolios Core skills to be acquired: Cognitive, literacy, numeracy, writing and reading Weighting: 40% Assesses Learning Outcomes: CLO1, CLO 2, CLO 3, CLO 4 &CLO 5			
	Component 2: Formative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Presentations/Concept Mapping/Practical Activities/ evidence of values learned/Group work/Evidence of equity and inclusivity/transferable skills Core skills to be acquired: Honesty, carefulness, accuracy and tolerance, Weighting: 40% Assesses Learning Outcomes: CLO1, CLO 2, CLO 3 & CLO 5			
	Component 3: Formative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Peer Review/evidence of portfolio/lesson plan and annotations/tutorial meetings with the student to discuss their teaching observation progress and areas for development. Core skills to be acquired: Pedagogical, observational and cooperative skills Weighting: 20% Assesses Learning Outcomes: CLO1, , CLO 3 & CLO 5			
Instructional Resources	Some resources that would be required to successfully enable an inclusive integrated science teaching would be Laboratory equipment, Chemicals, Smartphones, Tablets, Laptops, Desktop computer, Productivity tools (software that allow teachers to work better), Subject based instructional tools/applications, Instructional laboratories, Smart boards, Smart screens, Open ERs – YouTube, projectors and virtual laboratories			
Required Text (Core)	Abbey, T. K., Alhassan, M. B., Ameyibor, K., Essiah, J.W., Fometu, E., & Wiredu, M. B. (2008). *Ghana association of science teachers integrated science for senior high schools*. Accra: Unimax MacMillan.			

Additional Reading List	Abbey, T.K., &Essiah, J.W. (1995). *Ghana association of science teachers physics for senior high schools*. Accra: Unimax Macmillan. Ameyibor, K., & Wiredu, M. B. (2006). *Ghana association of science teachers chemistry for senior high schools*. Accra: Unimax MacMillan. Oddoye, E.O.K, Taale, K. D., Ngman-Wara, E., Samlafo, V., & Obeng-Ofori, D. (2011). *SWL integrated science for senior high schools: Students book.* Accra, Ghana: Sam-Woode Ltd. Zumdahl, S. S., &Zumdahl, S. A. (2009). *Chemistry.* Belmont, CA: Cengage Learning.

CONTEXT

The course on Ghanaian Identity, Culture and Art draws on the commonalities Social Studies and TVET share. Exploring the link between Culture and Arts through the lenses of social studies creates a basis for understanding the Ghanaian identity. The lack of appreciation of the Ghanaian Culture and Arts among youth results in stereotypes about TVET in national development. The creation of the connection between social studies and TVET through a course in the curriculum will help student teachers to embrace the significance of the Culture and Arts in strengthening the Ghanaian identity. The context of the course, therefore, is to demonstrate how cultural and artistic expressions and vocations in Ghana reinforce development and sustenance of the uniqueness of the Ghanaian identity. The arrangement of this course will alternate with Physical Education and Music and Dance.

Course Title	**Ghanaian Identity, Culture and Arts**						
Course Code		**Course Level: 2**	**Credit Value: 3**		**Semester: 1**		
Pre-requisite							
Course Delivery Modes	**Face-to-face** √	**Practical Activity** √	**Work-Based Learning** √	**Seminars**	**Independent Study** √	**e-learning opportunities** √	**Practicum**
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	The course intends to introduce student teachers to the relationship between Ghanaian identity, Culture and Arts. It aims at helping student teachers to understand diverse cultural elements of Ghana. It focuses on reinforcing student teachers' appreciation of the various vocations and artistic expressions of the Ghanaian. The course also aims at helping student teachers to appreciate the importance of the arts and culture in the expression of national identity. The course will explore aspects of equity and inclusivity to enable student teachers connect with diversity in teaching and learning. Student teachers will thus develop comprehensive understanding of their Ghanaian identity, culture and arts. This will enable them appreciate the need to use culture and arts to promote Ghanaian identity. Student teachers will be able to develop the competencies to support learners to understand and appreciate the culture and arts of Ghana. Student teachers will be able to take accounts of and respect learners' diverse linguistic and cultural backgrounds in teaching about Ghanaian identity, culture and artistic expression/vocations. The course will also cover the techniques for teaching Social Studies, emphasising the interdisciplinary linkages required to teach the primary school subject 'Our World, Our People'. Aspects of the course will introduce student teachers to basic teaching techniques that cover principles, concepts and skills for teaching learners how to appreciate Ghanaian culture and arts. The course will be delivered using differentiated instructional approaches. The assessment strategies of, for and as learning will include the use of quizzes, presentations, and project work. The course refers to NTS 1c, f &g; 2f; 3e, 3f & 3i. NTECF p. 20-22, 27-31, 38-42, 45.						

Course Learning Outcomes: including INDICATOR S for Each learning outcome[6]	**Outcomes** At the end of the course, Student teachers will be able to:	**Indicators**
	CLO 1. Demonstrate understanding of the concept of Ghanaian identity, culture and arts within the multicultural setting and explain how core values (honesty, integrity, civic responsibility and patriotism) and competencies that support the exercise of individual rights and responsibilities with special focus on equity and inclusivity responsibilities with special focus on equity and inclusivity (NTS 1e, NTS 3f, g; NTECF p.38-45)	• Explain the meaning of Ghanaian identity, culture and arts • Describe the relation between National identity, culture, the arts • Explain the rights and responsibilities that goes with our Ghanaian identity
	CLO 2. Appreciate the cultural diversity of the people in Ghana and the various vocations and artistic expressions in the country apply their understanding of cultural diversity of Ghana and apply it their interactions with students to support equity and inclusivity. (NTS 2e, f; NTECF p. 38-39, 45)	• Identify cultural elements that are unique to specific ethnic groups in Ghana • State common cultural elements among the ethnic groups in Ghana • Identify the various vocations and the arts of Ghana • Describe how they will apply knowledge of diverse cultural expressions of Ghana in their relationship with children to promote equity and inclusivity.
	CLO 3. Appreciate the importance of the arts and culture in the expression of our Ghanaian identity and the need to promote Ghanaian identity through expression of our culture and arts in the teaching of Social Studies and TVET. (NTS 1e,f, 2f, 3f, g; NTECF p.38-45)	• Examine the importance of cultural and artistic expressions of Ghana to our unique Ghanaian identity. • explain how they would use the teaching of Social Studies and TVET's support expression of our culture, arts and Ghanaian identity. • Explain how they will use knowledge and understanding of cultural diversity of Ghana and various forms of expression in their teaching to support children to demonstrate different ways of positively demonstrating Ghanaian identity and our core values • Explain how they would support Child development through colour expression and the arts

		CLO 4. Demonstrate knowledge and understanding of the skills and techniques of teaching and learning of Social Studies (Our World, Our People) and TVET and how to record experiences into SRJs). (NTS 1e, 3c ,f, g, j; NTECF p.38-45)		• Describe the structure and organisation of the curriculum of Our, World, Our People. • Discuss the recommended teaching and learning activities recommended in the Our World, Our People curriculum • Examine the recommended assessment techniques in the curriculum.
		5. Use ideas from their understanding, knowledge and application of the course in teaching and learning to record their experiences into SRJ. (NTS 3h; NTECF p. 45)		• Present a write up of reflection from the course in journals • Share reflection on the application of the course in teaching and learning during school visit recorded in SRJ with colleagues
	Course Content	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes**
		1	***Ghanaian Identity***	• Determinants of Ghanaian identity • Rights and responsibilities of individuals and the implications for equity and inclusivity	• ***Know-want to know and learnt.*** To enable students explain the meaning of Ghanaian identity, culture and the arts use the K-W-L technique. The teacher first initiates discussion with student teachers about what they already know about the topic, what they want to learn, and after the lesson indicate what they have learnt. • ***Think, pair, share*** (Pose a challenging question around rights and responsibilities connected with our identity as Ghanaians that students find difficult and allow students to think individually about the answer (e.g. 1-3 minutes) then pair student to discuss their answers and finally expand discussion to the whole class by calling students to discuss their proposed solutions to the challenge and any difficulties they had)
		2	***Culture in Ghana***	• Different Cultures and Arts in Ghana • Common cultural elements among the ethnic groups in	• ***Different task group work***; Different tasks group work (Assign learners to the different aspects of the topic to different groups to discuss) • ***Shower thought*** (Give or identify a focus problem, set rules for contribution and record

				Ghana • Application of knowledge of diverse cultural expressions/vocations of Ghana in relationship with children to promote equity and inclusivity.	ideas generated) • ***Different task group work***; Different tasks group work (Assign learners small groups and assign different aspects of the topic to different groups to discuss) • ***Role-play*** (select a problem to be role-played. This involves assigning specific roles to learners or asking learners to select their choice of roles to perform. Debrief after the act. This will help student teachers demonstrate how knowledge and understanding of diverse cultures of Ghana can be used in relationship with learners to promote equity and inclusivity).

		3	• **Arts and vocations in Ghana.**	• Creating Art (Basic theories of colour/ classifications of colours (primary/secondary/ tertiary) • Colour expressions and child development • Colour wheel. • Colour symbolism (Ghanaian) • Colour and occasions (Ghanaian) • Basic colour work: pattern making, painting, marbling, etc) • Calligraphy/lettering: mechanical/free hand/pen lettering	• ***Shower thought*** (Give or identify a focus problem, set rules for contribution and record ideas generated); • ***Concept mapping*** (Using graphic diagrams that demonstrate connections between concepts and ideas); • ***Concept mapping*** (Using graphic diagrams that demonstrate connections between concepts and ideas); • ***Audio-visual and tactile analysis*** (Provide opportunities for different diverse groups to participate in the topic. Tactile analysis will mean bringing in real objects to enable learners with disabilities to feel and experience the issue in discussion) • ***Different task group work***; Different tasks group work (Assign learners to the different aspects of the topic to different groups to discuss)
		4	***Teaching and learning of Social Studies and TVET***	• Value clarification approach; • Problem posing and solving approach; • Introduction to Basic School for Social Studies (Our World, Our People) and TVET curriculum and implications for	• ***Use of computer technology and multimedia*** (Apply the technology and multimedia devices in teaching the lessons); • Games (Identify a problem and discuss with learners and discuss rules for the games and specify and assign rules for the payers. After the game there is debriefing); • ***Think pair, share***(Pose a challenging question

				• Using of computer technology and multimedia in teaching and learning of social studies and TVET Developing and applying observational skills; • Teaching techniques in TVET (principles in concept definitions; introduction to practical work) Assessment strategies in Our World, Our People curriculum • Techniques of building Student Reflective Journal(SRJ)	around a topic or concept that students find difficult and allow students to think individually about the answer (e.g. 1-3 minutes) then pair student to discuss their answers and finally expand discussion to the whole class by calling students to discuss their • proposed solutions to the challenge and any difficulties they had); • ***Different tasks group work*** (Assign learners to the different aspects of the topic to different groups to discuss); • ***Shower thought*** (Give or identify a focus problem, set rules for contribution and record ideas generated); • ***Work-based visits*** (Organise work-based visits for student-teachers to visit schools for work-based learning and experience);
	Course Assessment: (Educative assessment of, for and as learning)	**Component 1** **Summary of Assessment Methods** **Component 1: Examination** Students teachers are assessed by summative examination on: • The concept of Ghanaian identity • The determinants of Ghanaian identity • Rights and responsibilities of Ghanaians • The Different Cultures in Ghana • Structure and organisation of the Our World, Our People curriculum • Colour and occasions (Ghanaian) **Learning Outcomes assessed**: CLO 1; CLO2; CLO 3; CLO 4 **Weighting (40%)**				
		Component 2: Coursework 1 Student teachers assessed through **Class Assignment** with **Oral Presentation** on the following:			

	• Present Power-Point and charts on the links between culture, arts/vocations and Ghanaian identity • Use internet resources (Open Educational Resources-OER) to present a written report on common cultural elements among the ethnic groups in Ghana • Discuss the assessment strategies in the Our World , Our People curriculum • Discuss the Arts and vocations in the Cultures of Ghana. • Develop different scenarios showing how to use knowledge of diverse cultural expressions of Ghana in relationship with children to promote equity and inclusivity. Learning Outcomes assessed: CLO1; CLO 2; CLO 4 **Weighting (40%)**
	Component 3: Coursework 2 Student teachers assessed through **Project Work** on**:** • Demonstrate Plan for Learning using on application of understanding of arts, vocations and culture in the teaching and learning of Social Studies to support development and sustenance of Ghanaian identity. **Learning Outcomes Assessed: CLO 3** **Weighting (20%)**
Instructional Resources	• Audio-visual Equipment • Pictures and posters of Art pieces and Cultural activities • Brailler, Scanner and Embosser Sign language • Resource Person.
Required Text (Core)	Awedoba, A. K. (2005). *Culture and development in Africa*. Accra: Historical Society of Ghana.
Additional Reading List	Astiz, M. F. (2007). The challenges of education for citizenship: local, national and global spaces. In *Comparative Education Review* Vol. 51, No. 1 (pp 49-81) Banks, J. A. (1990). *Teaching strategies for the social studies: inquiry, valuing and decision-making*. New York: Longman. Blege, W. (2001). *Social studies: Theory and practice*. Accra: Wallyblege. Ross, M. H. (2001). Action evaluation in the theory and practice of conflict resolution. *PSYCHOLOGIA. Pp 71-81*.

Supported Teaching in School

CONTEXT
Supported teaching in schools (STS) in year two (2) needs to consider planning, placement and classroom practice of the student-teacher in the following CONTEXT which are likely to impact on the effectiveness of placement and practice:

1. The Language policy issues –some student-teachers have not been trained in the dominant L1 to be used as medium of instruction in their placement schools, especially in the upper primary level.
2. Student-teachers often lack knowledge about cultural practices of some of the communities where they are placed.
3. Student-teachers are not adequately equipped to handle issues on ICT integration, equity and inclusivity as well as differentiated learning.
4. Portfolio assessment, which provides evidence of student-teachers' practice is not included in their overall assessment which focuses on exams.
5. Knowledge of reflective practice and classroom enquiry is not well developed among student-teachers, mentors, and tutors etc.
6. Poorly resourced partner schools do not provide appropriate environment for practice

Course Title	**STS: Developing Teaching 1**						
Course Code		**Course Level: 200**	**Credit value: 3**			**Semester 1**	
Pre-requisite	STS experience in Year 1 Pedagogic studies in Year 1						
Course Delivery Modes	**Face-to-face**	**Practical Activity**	**Work-Based Learning** √	**Seminars** √	**Independent Study**	**e-learning opportunities**	**Practicum**
Course Description	STS: Developing Teaching 1 course is a school-based component of the teacher education programme designed to give student-teachers the opportunity to continue to observe, teach small groups of upper primary children, motivate, support and manage the learning of upper primary children. Student-teachers will work collaboratively with their peers under the supervision of their mentors to identify, assess and analyze the needs of upper primary learners/children in all subjects regardless of their diverse socio-cultural and linguistic background, gender, and age. The course is mounted to enable student-teachers to understand better the key features of the school curriculum and issues of its continuity and progression within the different specialisms. Also, student-teachers will develop skills in conducting small scale classroom enquiry focusing on four (4) children and tracking their learning and progress. The course will further						

	enable student-teachers to have a growing understanding of the requirements of the National Teaching Standards in terms of their professional practice, knowledge, values and attitudes, and in particular their professional role as teachers The course will help to build and strengthen student-teachers' skills in keeping a professional teaching portfolio as well as a student reflective journal. Assessment of the course will be mainly by the contents in the professional teaching portfolio and report from tutors and mentors (NTS, 1f; 2b; 2d; & 3f) The course duration is: Six (6) weeks visits in **School 2** (one day per week in school to observe) **(3 credits)**	
Course Learning Outcomes	**OUTCOMES** **Upon completion of the course, student-teachers will be able to**:	**INDICATORS**
	CLO 1. Demonstrate skills of observing, teaching (small group e.g. 4 upper primary children), motivating, supporting and managing the learning of upper primary children in all subjects under the guidance of their mentors (in School 2) (NTS, 2a & b). (*School induction by school heads, lead mentors and mentors **in School 2***)	• Provide evidence of well-prepared induction schedule and procedures • Make oral presentations of knowledge gained during induction & observation by student-teachers to tutors. • Provide plan of observation outline for small group support and management • Provide report on activities showing support, motivation and management of upper primary children's learning • Provide records of specific observations from wider school environment and induction
	CLO 2. Demonstrate knowledge and skills in Identifying, assessing and analyzing the needs of upper primary learners with the support of their mentors (NTS, 2d, & 2e)	• Develop criteria for assessment showing variety of upper primary learners' needs • Provide records of small group discussion schedule between mentors & peers on diverse needs of upper primary learners'. • Compile list of upper primary learners' needs identified showing diversity
	CLO 3. Demonstrate knowledge and understanding of the key features of the basic school curriculum (BSC), focusing on issues of continuity and progression from the upper primary level (NTS, 2a & b)	• Provide records of group discussion schedule between mentors & peers on key features of the basic school curriculum

				• List key features of BSC that focuses on continuity & progression from the upper primary. • Record key features in SRJ
	CLO 4. Demonstrate knowledge and skills in critical reflection on whole class teaching observation and record in student reflective journal (SRJ) (NTS, 1a)			• Provide records of systematic reflection, sharing ideas with peers and mentor on teacher-pupils' classroom interactions, time of task, pupils' learning etc. in SRJ
	CLO 5. Demonstrate knowledge and understanding of the NTS requirements in terms of professional values, attitudes, practice and knowledge; and professional role as teachers (NTS, 1d, 1f, 2a)			• Review on modelling of positive behaviours and attitudes in school per the NTS requirements. • Show records in SRJ on modelling of intrinsic passion and enthusiasms for pupils to emulate
	CLO 6. Demonstrate knowledge and skills in developing professional teaching portfolio with evidence from classroom observations and upper primary children's needs (NTS, 1a, 1e, & 1f)			• Provide reports from observations on upper primary children's needs compiled in a developing professional teaching portfolio/e-portfolio). • Exhibit the use of appropriate ICT tools to record student-teacher using differentiated approaches to pupils (4 children) according to needs (audio, braille, embossers)
Course Content	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and Learning Activities (strategies) to achieve learning outcomes:**
	1	**Induction in School 2**	Orientation to school culture, key education policies etc. by heads, lead mentors and mentors	Use audio visual/tactile analysis/Video observation e.g. archival materials to sensitize student-teachers in School 2 Discuss in small groups (mentor and student-teachers) induction schedule and contents. Observe upper primary class with a checklist or take field notes (braille or tactile) of some expected events during interactions
	2	**Observation**	Observe classroom teaching and learning with focus on small group (e.g. 4 children)	▪ Observe class teaching and learning, teacher-pupils/pupil-pupil interactions ▪ Observe and record good practices in whole class

				and small group teaching & learning interactions/events
		Interactions and participation in school activities e.g. PTA, SMC, CPD staff meetings etc.	Wider school life activities	▪ Observe peers carrying out collaboratively planned activity with their group (4 children) or an individual, and how feedback is given on the learning to each other (NTS, 3d, 3f). ▪ Observe and participate in wider school life, e.g. staff meetings, assemblies and pupils' play/lunch time activities, attitudes and behaviours of teaching and non-teaching staff; record in SRJ ▪ Observe and participate in PTA, SMC or CPD meetings and record incidents in SRJ (NTS, 1e) (Use checklist of items to be observed and record; or use field notes recording strategies) ▪ Write in student reflective journal (SRJ) ▪ Keep a professional teaching portfolio or e-portfolio
	3	**Identification of learners' needs**	List of diverse needs of upper primary learners'	▪ Examine and tabulate diverse needs of upper primary learners (student-teacher and mentor work together) (NTS, 2e) ▪ Identify and list emerging educational needs of upper primary learners (Ref. SEN strand)
	4	**Basic school curriculum**	Key features of the school curriculum at the upper primary level	• Engage student-teachers in group discussions with their mentors on BSC (NTS, 2b) • Identify and list issues of continuity and progression (scope and sequence) in BSC • Compile key features of BSC showing evidence of continuity and progression from the upper primary level (NTS, 2a & b)

	5	**Student Reflective Journal**	Template of a reflective journal with key items (pay attention to inclusivity/ diversity & ICT)	▪ Use small groups to discuss, analyse and evaluate sampled reflective journals that includes elements of inclusion and diversity ▪ Develop reflective skills and reflect systematically on concrete/specific events ▪ Record reflections continually in student reflective journal (NTS, 1a)
	6	**Develop professional teaching portfolio**	Template for a professional teaching portfolio	▪ Analyse contents in sampled professional teaching portfolios with mentor ▪ Continue to use outline to build a professional teaching portfolio guided by mentor ▪ Develop professional portfolio building skills systematically ▪ Compile collected artefacts in professional teaching portfolio
	7	**NTS requirements**	Professional values, attitudes, practice and knowledge	After using ICT to record wider school activities: • Use debates/role play/games to exhibit expected or positive behaviours, attitudes and values of a professional teacher. • Mentor gives feedback on values, attitudes etc. exhibited (NTS, 1b & f)
	Note: All reports should consider braille and large font size prints (on request)			
Course Assessment (Educative assessment: of, for and as learning	**Component 1: PROFESSIONAL TEACHING PORTFOLIO (NTS, 1a, e, & f)** **Summary of Assessment Method**: Well organised, structured, reflective, representative, selective and showing creativity in presentation. [Rubrics for assessment include: Personal teaching philosophy, Photographs/other artefacts & reflections from observations and induction, SRJ, List of identified key features of BSC etc.) This is assessment of learning and assessment as learning Weighting: 70 % **Assesses Learning Outcomes:** Develop a professional teaching portfolio with evidence from student-teacher's observations in classroom (CLO, 1, 2, 3).			

	Component 2: Mentors/Lead mentors and Tutors evaluation of student-teacher behaviour (values & attitudes) in School (NTS, 1d, e, f, & g) **Summary of Assessment Method:** Reports from mentors indicating student-teachers' punctuality, regularity, discipline, respect for authority, human relation skills (e.g. interaction with pupils & other teachers), participation in co-curricular activities, etc.; Tutors' feedback reports on student-teacher This is assessment of learning and assessment for learning **Weighting: 30 %** **Assesses Learning Outcomes:** Identify traits of professionalism (professional values & attitudes) in school (CLO, 1,2,3, & 5)
Instructional resources	• Videos of Classroom teaching & learning • Samples of classroom/wider school observation checklists • Samples of feedback instruments • Samples of professional portfolios • Samples of reflective log/SRJ • Samples of Staff/SMC/PTA meeting notes • T-TEL materials from www.t-tel.org • TESSA materials from www.tessafrica.org • Teaching Practice Handbooks from Universities and Colleges of Education • Teaching practice handbook
Required Text (Core)	Cohen, L.; Manion, L. Morrison, K., & Wyse, D. (2010). *A Guide to Teaching Practice* (5th Ed.) New York: Routledge. Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). *Pedagogy, curriculum, teaching practices and teacher education in developing countries. Education rigorous literature review*. Department for International Development.
Additional Reading list	Lane, K. L., Carter, E. W., Common, C., and Jordan, A. (2012), Teacher expectations for student performance: Lessons learned and implications for research and practice. In Bryan G. Cook, Melody Tankersley, Timothy J. Landrum (Eds.) *Classroom behavior, contexts, and interventions: Advances in learning and behavioral disabilities* (Volume 25). Emerald Group Publishing Limited, pp. 95-129. Ormrod, J.E. (2014). *Educational psychology: Developing learners.* Pearson: Boston. The Sabre Charitable Trust (2017). *Assessment manual*. Accra: Conker House Publishing Ltd. Vavrus, F., & Bartlett, L. (2013). Testing and teaching. In F. Vavrus & L. Bartlett (Eds.), *Teaching in tension: International pedagogies, national policies, and teachers' practices in Tanzania (pp. 93-114).* Rotterdam: Sense.

Year Two Semester 2

Pedagogic Knowledge with ICT & Inclusion: SEN/Gender

PEDAGOGY 1

CONTEXT

Learners are assessed for varied purposes including placement, diagnostic and selection. There is therefore, the pivotal need for all student teachers meant for teaching at the primary school level to be abreast of, and equipped with knowledge of the various assessment formats. In many cases much emphasis is placed on traditional assessment modes and objective based assessment to the neglect of authentic or performance assessment. Differentiated assessment to meet varying learning strengths and needs of primary school learners becomes indispensable.

Course Title	**Differentiated Assessment for Primary Schools**						
Course Code			**Course Level: 200**	**Credit value: 3**		**Semester 2**	
Pre-requisite	**Introduction to School based Inquiry, Differentiated Learning and Curriculum Planning**						
Course Delivery Modes	**Face-to-face: [√]**	**Practical activity[√]**	**Work-based learning [√]**	**seminars[√]**	**Independent Study: [√]**	**e-learning opportunities[√]**	**Practicum: [ ]**
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	The course is designed to expose student teachers to basic concepts and principles of assessment of primary school learners as well as managing transition from Upper Primary through to the junior high school level. It is also structured to enable them identify and apply the various forms and types of assessment to address the needs of diverse learners in order to meet the grade level expectations and national assessment benchmarks. Student teachers will also be guided to examine various processes involved in planning and administering assessment in inclusive learning settings and interpret results for instructional decision making. Current naturalistic or authentic assessment processes, assessment tools and building digital and manual portfolios will be explored. In this course, student teachers will be engaged using varying interactive techniques such as demonstrations, play and other age/grade level activities. They will be assessed through, projects and assignments among others. These are meant for students teachers to acquire a repertoire of knowledge and skills to enable them apply appropriate techniques, processes and procedures to gather relevant data from differently abled middle childhood learners in inclusive and multi-grade setting in order to support their learning. The course will also explore issues within the context of Ghanaian core values, critical thinking, honesty, commitment and passion, creativity and informed citizenry, digital literacy as well as and lifelong learning (***National Teachers' Standard: 1c, 1e, 1f, 1g, 2a/NTECF: crosscutting issues; Core skills, Professional values and attitudes***).						

Course Learning Outcomes	On successful completion of the course, student teachers would be able to:	Indicators
	CLO 1. demonstrate knowledge, understanding of basic concepts in assessment such as assessment, testing, measurement and evaluation and the purposes of assessment **(NTS 3k, 3l, 3p; NTECF p.46)**.	• Identify and explain the characteristics of basic concepts such as assessment, test, measurement, and evaluation, as well as the purposes of assessment. • Differentiate among assessment, test, measurement, and evaluation. • Use age appropriate differentiated assessment
	CLO 2. demonstrate knowledge, understanding and use of assessment for learning/of learning and as learning through projects **(NTECF; NTS 3k, 3l, 3m, 3p)**.	• Identify the types of assessments • Demonstrate the use of assessment for learning/of learning and as learning through projects.
	CLO 3. demonstrate knowledge and understanding of the grade level expectations and assessment benchmarks for basic schools in Ghana**(NTS 3g, 3k, 3l, 3p;NTECF)**.	• Outline the grade level expectations for middle childhood learners. • Discuss the grade level expectations and assessment benchmarks for upper primary graders in Ghana.
	CLO 4. demonstrate understanding and use of comprehensive and appropriate learning objectives and outcomes in relation to the various domains of learning in learning plans**(NTECF; NTS 3k, 3l, 3p)**.	• Enumerate the criteria in setting learning objectives. • Formulate comprehensive and appropriate learning objectives and outcomes in line with the various domains of learning in learning plans.
	CLO 5. demonstrate understanding and development of a scoring guide for constructed test items for a selected topic, and design a table of specification **(NTECF; NTS 3f, 3l)**.	• Develop a scoring guide for constructed test items (objective and essay type) for a selected topic. • Design a table of specification and a scoring guide.
	CLO 6. demonstrate understanding and use of procedures for planning inclusive classroom tests and assessments**(NTECF; NTS 3f, 3g)**.	• Discuss the procedures for planning inclusive classroom tests and assessments. • Apply the procedures for planning and designing inclusive classroom tests and assessments.
	CLO 7. demonstrate understanding, planning and developing authentic/ performance assessment tasks, considering gender and learners with diverse strengths in inclusive and multi-grade classrooms **(NTECF; NTS 3k, 3l, 3p)**.	• Explain authentic/performance assessment and discuss the characteristics of the types of authentic/performance assessment tasks. • 7.2 Plan and develop authentic/performance assessment tasks for inclusive and multi-grade classrooms.

	CLO 8. demonstrate understanding and use of norm-referenced and criterion-referenced modes of interpreting tests and manage data gathered on various aspects of the learners **(NTS 3p)**.		• 8.1 Collect data on various aspects of learners with different tools, analyse and use results to support learning of diverse learners. • 8.2 Design differentiated assessment for learners with SEN in inclusive settings. • 8.3 Demonstrate how norm-referenced and criterion-referenced modes of interpreting tests are used.	
	Units	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes**
Course Content: Differentiated Assessment in Basic Schools	**1**	Definition of terms and nature of assessment	The concept assessment; test; measurement and evaluation; formative and summative evaluation; scales of measurement	Tutor-led discussions on definition and nature of assessment; Individual and group presentations on nature of assessment; Concept mapping/cartooning on meaning and nature of assessment.
	2	Principles and purposes of assessment	General principles of assessment, purposes of assessment; Assessment of Learning (AoL), Assessment as Learning (AaL), Assessment for Learning (AfL);	Teacher-led discussion on the meaning and principles of assessment; Individual and group presentations on purposes of assessment; Individual and group projects on classroom activities that suit assessment of learning (AoL), assessment as learning (AaL), and assessment for learning (AfL).
	3	Types of assessment	Formative assessment; summative assessment; diagnostic assessment; performance assessment; types of formative and summative assessment; characteristics, merits and demerits of continuous assessment; school-based assessment; standards-based assessment; national assessment benchmarks; grade level expectations for basic education in Ghana	Tutor-led discussion on types of assessment; Group presentation and discussion on characteristics, merits and demerits of continuous assessment; Concept mapping/cartooning on school-based, standards-based assessments, and national assessment benchmarks; Tutor-led discussion on grade level expectations for basic education in Ghana.

	4	Taxonomies of educational objectives	The concept of learning outcomes; behavioural objectives; learning objectives; cognitive domain objectives, affective domain objectives and psychomotor domain objectives; the profile dimensions	Tutor-led and student-led discussions on the concept of learning outcomes and types of objectives; Individual and group presentations on cognitive, affective and psychomotor domains; Individual and group projects to design taxonomies of educational objectives.
	5	Item formats	Types of Objective-type tests and essay-type tests; developing tables of specification and scoring guides	Tutor led discussions on types of objective-type-test; Talk for learning approach for types of essay-type test; Individual and group projects on developing tables of specification, test items and scoring guide.
	6	Planning classroom tests and assessment	Types of achievement tests and characteristics; constructing, assembling, administering and appraising of tests	Talk for learning approach for types and characteristics of achievement tests; Tutor-led and student-led demonstrations on constructing, assembling, administering and appraising test items; Reflective notes on planning classroom tests and assessment.
	7	Assessment procedures for inclusive classrooms	The concept authentic/performance assessment; principles of fair assessment; learning stories approach, socio-cultural approach; using types of observation, check lists, rating scales, clinical interviews, conversation, gallery work; project development; task analysis; building portfolios	Concept mapping/cartooning for meaning and characteristics of the types of authentic or performance assessment; Group presentations of how to plan and develop authentic/performance assessment tasks for inclusive and multi-grade classrooms.

	8	Data presentation and Interpretation of tests and authentic assessment data	Descriptive statistics; Norm-referenced and criterion criterion-referenced interpretation of data; validity and reliability issues; types of feedback and how to use feedback	Tutor-led discussion on interpretation of results from norm-referenced and criterion-referenced tests; Student-led demonstration on how norm-referenced and criterion-referenced modes of interpreting tests are used
Course Assessment (Educative assessment: of, for and as learning)	**Component 1**: Formative Assessment (QUIZZES) Summary of Assessment Method: Quizzes on nature of assessment, principles and purposes and types of assessment and a group project on assessment for/of and as learning(soft skills to be developed include: honesty, digital literacy, respect for diversity, critical thinking) Weighting: 20% Assesses Learning Outcomes: CLO 1 CLO 2 and CLO 3			
	Component 2: Formative Assessment (INDIVIDUAL AND GROUP PRESENTATIONS) Summary of Assessment Method: Peer assessment of group projects and presentations writing objectives across domains, designing table of specification and writing test items on selected topics in their specialisms, demonstration and individual/group presentations on planning, conducting and interpreting tests in inclusive and multi-grade classroom(soft skills to be developed include: honesty, digital literacy, respect for diversity, critical thinking) Weighting: 40% Assesses Learning Outcomes: CLO 4 CLO 5 CLO 6 CLO 7			
	Component 3: Summative Assessment (END OF SEMESTER EXAMINATION) Summary of Assessment Method: End of semester examination on nature of assessment, principles, purposes and types of assessment; designing table of specification and writing test items; conducting and interpreting tests. **Weighting:** 40% **Assesses Learning Outcomes:** CLO 1,2,3,4,5,6,7,8			
	1. TESSA Online Educational Resources (www.tessafrica.net) 2. T-TEL Modules (www.t-tel.org). 3. Other Relevant Online Resources (www.Tess-india.net, www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan academy) 4. The iBox (CENDLOS) 5. YouTube			
Required Text (Core)	Asamoah-Gyimah, K., & Anane, E. (n.d.). *Assessment in basic schools*. Cape Coast. Institute of Education. Eshun, P., & Effrim, P. K. (2008). *Basics in measurement, evaluation and statistics in education*. Cape Coast: Yaci Publications Tamakloe, E. K. Amedahe, F. K., & Atta, E. T. (2005). *Principles and methods of teaching*. Accra: Black Mask Ltd			

Additional Reading List	Alonge, M. F. (2004). *Measurement and evaluation in education and psychology* (2nd ed.). Ado-Ekiti: Adedogo Pub. Co. Anastasi, A. (1982). *Psychological testing* (6th ed.). New York: Macmillan Publishing Inc. Archer, F. K. (2002). Measurement and evaluation in education. Kumasi: Paks. Burke, J. & Larry, C. (2008). *Educational research: Quantitative, qualitative, and mixed approaches*. New York: Sage Publication. Carey, L. M. (2001). *Measuring and evaluating school learning*. Boston: Allyn Bacon. Gronlund, E. (2003). *Assessment of students' achievement*. (7th ed.). Boston: McGrawHill. Nitko, A. J. (2001). *Educational assessment of students* (3rd ed.). New Jersey: Prentice-Hall. Onivehu, A. O. & Amoah, S. A. (2002). *Essentials of measurement and evaluation*. Accra: K. 'N' B. Publishers.

CONTEXT

Teaching and learning is often regarded as two sides of a coin. For both to be effective and successful, there is need for creating suitable environments. The ability to create these environments partly depends on the level of teachers' knowledge of the psychology of learning in middle childhood. The ability to use varied instructional strategies for learners with diverse learner characteristics, abilities and developmental stages of middle childhood learners is the hallmark of an effective teacher. In same vein, it is expected that adopting differentiated classroom and behaviour management strategies to meet the peculiar strengths, needs and challenges of primary school learners will promote effective teaching and learning. It is expected that the course will equip student teachers with the theoretical knowledge and practical skills to foster effective learning and manage primary level learners' transition from Upper Primary through to the JHS.

<table>
<tr><td>Course Title</td><td colspan="6">Psychology of Learning in Middle Childhood</td><td></td></tr>
<tr><td>Course Code</td><td colspan="3"></td><td colspan="2">Course Level: 200</td><td>Credit value: 3</td><td>Semester 2</td></tr>
<tr><td>Pre-requisite</td><td colspan="6">Student teachers have knowledge in psychological basis of learning</td><td></td></tr>
<tr><td>Course Delivery Modes</td><td>Face-to-face: [√]</td><td>Practical activity[√]</td><td>Work based learning[√]</td><td>Seminars[√]</td><td>Independent Study: [√]</td><td>e- learning opportunities [√]</td><td>Practicum: [ ]</td></tr>
<tr><td>Course Description for significant learning (indicate NTS, NTECF, to be addressed)</td><td colspan="7">This course is meant to further expose and consolidate student teachers' knowledge about the psychology of learning at the middle childhood level. The course focuses on the stages of human and language development and their implications for teaching and learning at the primary school level. Student teachers would be exposed to theories of learning, transfer of learning, and behaviour management techniques and their implications for teaching and learning. In the delivery of the course, differentiated interactive and assessment techniques would be employed to help student teachers examine the educational implications of the stages of development, learning theories and behaviour management techniques. This course will thus equip student teachers with the knowledge and skills that will enable them apply differentiated instruction as well as managing transitional strategies from early grade through primary to the JHS (NTECF, NTS 3d, p.14)</td></tr>
<tr><td rowspan="2">Course Learning Outcomes</td><td colspan="4">On successful completion of the course, student teachers would be to:</td><td colspan="3">Indicators</td></tr>
<tr><td colspan="4">CLO 1. demonstrate knowledge and understanding of the concepts and principles of physical, intellectual and social development in middle childhood and their learning implications (NTECF, NTS 3d, p.14).</td><td colspan="3">• Identify the stages of physical development in middle childhood and explain their implications for learning.
• Identify the stages of intellectual development in middle childhood and explain their implications for learning.
• Explain the stages of social development in middle childhood and their implications for learning.</td></tr>
</table>

	CLO 2. demonstrate knowledge and understanding of the theories and factors affecting language development in middle childhood and their learning implications **(NTECF, NTS 3d, p.14)**.			• Explain the major theories of language development and their implications for middle childhood learning. • Discuss factors that promote language development and acquisition in middle childhood. • Discuss factors that inhibit language development and acquisition in middle childhood.
	CLO 3. demonstrate knowledge and application of the principles underlying the theories of learning and how they influence teaching and learning in middle childhood **(NTS 2f, p.17, 3c, 3g, p. 14)**			• Explain the behavioural approaches to learning in middle childhood • Explain the cognitive approaches to learning in middle childhood • Differentiate between the behavioural and cognitive perspectives to learning and their learning implications.
	CLO 4. demonstrate and apply the concept of transfer of learning in differing situations in primary schools and classrooms **(NTECF, p.20, NTS 2d, p.13)**.			• Explain the concept "transfer of learning." • Role-play to illustrate transfer of learning in the psychomotor, cognitive and affective domains. • Develop posters to illustrate transfers of learning across the domains
	CLO 5. demonstrate knowledge and understanding of classroom and behaviour management in inclusive primary schools. **(NTS, 3d,3f, p.14)**,			• Explain the concepts "classroom" and "behaviour" management. • Discuss strategies to effectively manage classroom and middle childhood behaviour. • 5.3. Differentiate between Piaget's and Kohlberg's models of moral development and their relationship to classroom behaviour.
Course Content:	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes:**
	1	Stages of Human Development	Physical, intellectual and social development and their learning implications	Talk for learning approaches, individual and group presentations using power point, reflective notes, case study, audio-visual and tactile analysis

	2	Language Development	Theories of language development; Factors affecting language development; Factors promoting language acquisition; Educational Implications of language development	Debates, individual and group projects using ICT, individual and group presentations using power point, audio-visual and tactile analysis
	3	Learning Theories	Meaning and theories of learning (Behaviourism, Cognitivism, Constructivism); Educational Implications of theories of learning	Individual and group projects using ICT, debates, case study, sociometric techniques, talk for learning approaches, audio-visual and tactile analysis, simulations
	4	Transfer of Learning	Meaning and types of transfer of learning; conditions for transfer to take place; educational implications for transfer of learning transfer of learning; conditions for transfer to take place; educational implications for transfer of learning	Discussions, debates, talk for learning approaches, case study, audio-visual analysis
	5	Classroom and Behaviour management in primary schools	The concept of "classroom" and "behaviour"; Moral development (Piaget and Kohlberg's) Classroom and behaviour management strategies; Creative approaches to classroom and behaviour management in primary schools, Behaviour management of pupils with SEN.	Audio-visual analysis, individual and group presentations using power point, case study, role playing
Course Assessment (Educative assessment: of, for and as learning)	**Component 1**: Formative Assessment (INDIVIDUAL AND GROUP PRESENTATION) Summary of Assessment Method: i. mixed ability group presentation on physical, intellectual and social development. ii. Individual presentation on learning implications of stages of development (soft skills to be developed include: collaboration and communication, honesty, respect for diversity, critical thinking). Weighting: 30% Assesses Learning Outcomes: CLO 1			
	Component 2: Formative Assessment (QUIZZES) Summary of Assessment Method: i. Quiz on the theories of language development and their learning implications and theories of learning (Behaviourism, Cognitivism, and Constructivism) and their educational implications; transfer of learning and classroom behaviour strategies (soft skills to be developed include: honesty, digital literacy, respect for diversity, critical thinking). Weighting: 30% Assesses Learning Outcomes: CLO 2 CLO 3 CLO 4 CLO 5			

	Component 3: SUMMATIVE(END OF SEMESTER EXAMINATION) Summary of Assessment Method: End of Semester examination on physical, intellectual and social development; learning implications of stages of development; theories of language development and their learning implications and theories of learning (Behaviourism, Cognitivism, and Constructivism) and their educational implications; transfer of learning and classroom behaviour strategies(soft skills to be developed include: critical thinking, honesty) Weighting: 40% Assesses Learning Outcomes: CLO 1, 2, 3, 4, 5
Teaching and learning resources	1. Audio-visuals and animations from YouTube 2. Projectors and computers 3. Solid and cross section models of the brain
Required Text (Core)	Ammah, C. (2016). *Developmental psychology for educators*. Accra: Janlex Ventures. Feldman, R. S. (2008). *Understanding psychology* (8th ed.). New York: McGraw-Hill. Ormrod, J. E. (2014). *Essentials of educational psychology* (4th ed.). New Jersey: Pearson. Owusu-Banahene, N. O. (2007*). Educational psychology: The science of learning* (2nded.).Kumasi: Narco Printers.
Additional Reading List	Berlinder, D. C. & Calfee, R. C. (Eds.) (2006). *Handbook of educational psychology*. New York: Macmillan, Brown and Benchmark. Berk, L. E. (2012). *Infants and children: Prenatal through middle childhood* (7th ed.). Toronto: Allyn & Bacon. Bronfenbrenner, U. (2009). *The ecology of human development: Experiments by nature and design*. Cambridge, Massachusetts: Harvard University Press. Dacey, J. S., Travers, J. F., & Fiore, L. (2008). *Human development: Across the lifespan* (7th ed.). Boston: McGraw-Hill. Giccarelli, S. K., & White, J. N. (2009). *Psychology*. New Jersey: Pearson Education, Inc. Oppong Frimpong, S., & Amissah, P. A. K. (2009). *Psychology of adolescence*. Accra: Emmpong Press. Shelton, F. &Brownhill, S. (2008). *Effective behaviour management in the primary classroom*. England. Open University press. Zanden, V. J. W. (1993). *Human development*. (5th ed.). McGraw-Hill: USA.

CONTEXT

Some ITE learners enter the programme with limited knowledge in the structure of a Ghanaian language and this poses a great challenge to the teachers. There is also lack of technological tools to teach some aspects of the structure of a Ghanaian language, which negatively affects the teaching and the learning of the Ghanaian language, and also ability of the ITE learners to apply the knowledge to be acquired.

Course Title	**STRUCTURE OF A GHANAIAN LANGUAGE**						
Course Code		**Course Level: 200**	**Credit value: 3**	**Semester: 2**			
Pre-requisite	**N/A**						
Course Delivery Modes	**Face-to-face** ☐	**Practical Activity** ☐	**Work-Based Learning** ☒	**Seminars** ☐	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF to be addressed)	This course introduces students to knowledge of the structure of a Ghanaian language. The course is divided into two components, namely phonetics and phonology, and morphology and syntax of a Ghanaian language. The phonetics aspect of the first component covers the phonetic description of vowels and consonants, while the phonology aspect concentrates on both vocalic and consonantal phonology as well as the distribution of vowels. Consonantal phonology focuses on the distribution of consonants, and phonological processes: assimilatory and syllable structure processes. The notion of syllable will also be taught in this component. The morphology aspect of the second component is designed to equip students with the knowledge and the skills to identify morphemes, and types of morphemes as well as the identifying the morphological features of the word classes. Again, the course looks at the word formation processes. The syntax aspect equips students with the knowledge and the skills to be able to identify and describe the structure of phrases and clauses. The course will be taught by the following pedagogical mode: discussion, group/individual work presentation, classroom observation, school visits, brainstorming, and demonstration. The course will be assessed through examination, class assignments and presentations, checklist for learning outcomes, demonstration, peer assessment, project work, report on classroom observation, report on supervision by mentors/lecturers, portfolio, and class participation. The course is designed to meet the following NTS, NTECF, BSC, GLE expectations and requirements: (NTS 1a, b: 12), (NTS 2c: 13), (NTS 2e: 13), (NTS 2f: 13), (NTS 3e: 14), (NTS 3j: 14), (NTECF 3: 20), (NTECF 3: 29), and (NTECF 3: 25).						

Course Learning Outcomes including INDICATORS for each learning outcome.	**Learning Outcomes** On successful completion of the course, student teacher will be able to:	**Indicators:**
	1. demonstrate knowledge and understanding of the structure of a Ghanaian language of study, and facilitate its use among learners. (NTS 2c: 13), (NTS 2e: 13), (NTS 3c: 14), (NTECF 3: 20).	• identify each aspect of the structure of a Ghanaian language • explain each aspect of the structure of a Ghanaian language. • facilitate the use of each aspect of the structure of a Ghanaian language in learning
	2. Integrate technology to the teaching of the structure of Ghanaian language effectively to enhance learners understanding. (NTS 3j:14), (NTS 1d: 12), (NTS 2d:13), (NTS 3e: 14), (NTECF 3: 29).	• use appropriate technological tools to record and analyze the structure of a Ghanaian language • apply their knowledge in the use of technological tools to teach the structure of a Ghanaian language
	3. Work in collaboration with individuals or smalls groups under the guidance of their mentor, and show some ability to consider individual learner's backgrounds/experience in Ghanaian language learning. (NTS 1e: 12), (NTS 3f: 14), (NTECF 4: 42), (IEP 5.1.1.1.a: 11)	• work in positive collaboration with mentors, colleagues as part of their community of practice • employ strategies that show individual needs/strengths of the learners are considered
	4. prepare appropriate level teaching learning materials to teach the structure of a Ghanaian language. (NTS 3j: 14), (NTECF 4: 43), (NTS 3f, g: 14), (NTECF 4: 43).	• employ various appropriate teaching and learning resources in classroom • use appropriate teaching materials to cater for learners with different backgrounds
	5. understand and interpret key features of the structure of a Ghanaian language component of the Ghanaian language curriculum and plan lessons from it. (NTS 2b, d: 13), (NTECF 3: 20), (NTS 2f:13), (NTECF 3: 32)	• show their awareness of the existing learning outcomes of learners • factor in individual learner's diversity in planning and delivery lessons
	6. undertake small-scale action research in the Ghanaian language focusing on learners' learning and progress, and to reflect on and develop their teaching. (NTS 1d, g: 12), (NTS 3b: 14), (NTS 1a, b: 12), (NTECF 4: 39)	• design and undertake a small-scale action research to improve teaching and learning of a Ghanaian language • reflect on and demonstrate progress in their professional development

Course Content	**Units**	**Topics**	**Sub-topics**	**Suggested Teaching Learning Activities:**
	1	Vocalic phonology of a Ghanaian language	1. Phonetic description & classification of vowels of a Ghanaian language	• Attentive listening/watching of audio/video recording of vowel sounds by student teachers paying particular attention to students SEN, gender, etc. issues • Student teachers discuss contents of audio/video recordings paying particular attention to student teachers SEN, gender, etc. issues. • Student teachers demonstration the articulation of vowels
			2. Vowels (distribution, sequences).	• Individual/group presentation of assigned tasks on vowel distributions and sequences.
	2	Consonantal phonology of a Ghanaian language	1.Phonetic description of consonants of a Ghanaian language	• Attentive listening/watching of audio/video recording of consonant sounds by student teachers paying particular attention to individual student teacher's diversities, such as linguistic, gender, etc. issues. Student teachers discuss contents of audio/video recordings paying particular attention to student teacher's SEN, gender, etc. issues.
			2. Consonants (distribution)	• Individual/group presentation of assigned tasks on vowel distributions and sequences. In the groupings and the selection of the groups, particular attention should be paid to student teachers' SEN, gender, etc. issues. Student teachers do peer assess their own class presentations
	3	Some phonological processes of a Ghanaian language	1. Phonological processes (assimilatory and syllable structure)	• Student teachers reflect on their previous knowledge on assimilation. Class discussion on types of phonological processes. Individual/group of students listens to audio-recorded conversations and identifies phonological processes in them.

	4	Basic concepts of morphology of a Ghanaian language	1. Morphology (definition, scope, types) 2. Morpheme (definition, scope, types, forms) 3. Word-formation processes in a Ghanaian language 1. Affixation 2. Word formation processes	1. Class brainstorming on the concept of morphology. 1. Class brainstorming on the concept of morpheme. Student teachers assigned the task of segmenting words into morphemes. 1. Student teachers discuss the concept of affixation. Student teachers are assigned data analysis task on affix identification. 2. Student teachers reflect on their previous knowledge on compounding. Class discussion on some word formation processes. Student teachers are assigned task on word formation processes identification.
	5	Basic concepts of syntax of a Ghanaian language	1. Syntax (definition and scope) 2. Syntactic structure of a Ghanaian language - Lexical categorisation and structure of syntax (word, phrase, clause, sentence) - Coordination	1. Class brainstorming on the concept of syntax. 2. Students reflect on the experiences on the topic. Student teachers make individual/group presentation on identification of syntactic structure. In the groupings and the selection of the groups, particular attention should be paid to student teachers' SEN, gender, etc. issues. Student teachers do peer assess their own class presentations. 1. Student teachers discuss the concept of coordination. Student teachers peer assess their colleagues students' assigned work on coordination.

	6	Preparing TLMs for teaching the structure of a Ghanaian language	1. Selecting, designing and using of TLMs for teaching and learning the structure of a Ghanaian language 2. Selection and use of textbooks as TLMs for teaching and learning the structure of a Ghanaian language	1. Student teachers actively participate in designing TLMs. Student teachers demonstrate the use of TLMs 2. Student teachers demonstrate the use of TLMs by students in class. Student peer assess their own choices of textbooks as TLMs
	7	Interpreting the structure of a Ghanaian language component of the Ghanaian language curriculum	1. Interpretation of the curriculum 2. Designing scheme of work 3. Preparing language lesson plan	1. Students reflect on their personal experiences in learning the structure of a Ghanaian language. 2. Students discuss the component of the curriculum. Group presentations based on interpreting the component of the curriculum 3. Group presentations on designing various components of the language lesson plan. Student teachers do peer assess their own class presentations 3. Students demonstrate how to use a lesson plan to teach in class. Student teachers peer assess their own teaching.
Course Assessment (Educative assessment of, for and as learning)	**Component 1**: COURSEWORK Summary of Assessment Method: 1. Examination: It will comprise (i) selection tests, namely multiple choices, and (ii) supply tests such as fill-ins. Weighting 10% 2. Assignments/class presentations: They will consist of 1 individual presentation and 2 group presentations. Weighting 20% **Total Weighting: 30%** Assesses Learning Outcomes: 1. Examinations: The examination will assess student teachers against the following CLOs: 1. 2. Assignment/class presentations: The assignments will assess the problem-solving skills and student teacher's ability to identify and explain the structure of a Ghanaian language, and will address CLOs: 2, 4, & 5.			

	Component 2: COURSEWORK Summary of Assessment Method: 1. Peer assessment: It will involve assessed works by other student teachers. Weighting 10% 2. Class participation: It will comprise records on students' active participation in class in terms of contributions to lessons and class activities. 20 % 3. Demonstration: It will involve student teacher's ability to demonstrate enthusiastically their knowledge and skills in an aspect structure of a Ghanaian language. Weighting 10% **Total Weighting: 40%** Assesses Learning Outcomes: 1. Peer assessment: It will assess student teacher's objective assessment of works by their colleagues, which will address CLOs 4, 5, & 6. 2. Class participation: It will assess student teacher's active participation in class in terms of contributions to lessons and class activities. This will address CLOs 1, 2, 3, 4, 5, & 6. 3. Demonstration: It will assess student teacher's ability to demonstrate enthusiastically their knowledge and skills in an aspect structure of a Ghanaian language, which addresses CLOs 2, 4, & 5.
	Component 3: COURSEWORK Summary of Assessment Method: 1. Report: It will comprise two components: (i) written report on small-scale action research by students. Weighting 15% (ii) report on supervision by mentors/lecturers. Weighting 5% 2. Professional Portfolio: It will consist of mentor's assessment comments, student teacher's presented works, checklist for learning outcomes. Weighting 10% **Total Weighting: 30%** Assesses Learning Outcomes: 1. Report: (i). Written report by students: It will assess student teacher's written report on a small-scale research on the application of the structure of a Ghanaian language in teaching and learning. This addresses the CLO 6. (ii) Written report by mentors/lecturers: It will assess student teacher's observation activities, which addresses CLO 5 & 6. 2. Professional portfolio: It will assess student teacher's ability to organise himself or herself as s/he develops professionally. This will address CLOs 2, 3, 4, 5, & 6.

Instructional Resources	1. Language laboratory 2. LCD projector 3. voice recorder
Required Text for all Ghanaian Languages:	Akpanglo-Nartey, J. N. (1989). *An introduction to Linguistics for non-native speakers of English.* Tema: Sakumo Books. Tallerman, M. (1998). *Understanding syntax*. New York: Oxford University Press Inc. Yule, G. (2010). *The study of language* (4th ed.). Cambridge: Cambridge University Press.
Additional reading list for Ga	Ablorh, O. (1961). *Ga wiemɔ lɛ Hesusumɔ*. Accra: Presby Book Depot. Akpanglo-Nartey, J. N. (1989). *A phonetics course for non-native speakers of English*. Tema: Sakumo Books. Akpanglo-Nartey, J. N. &Al-Arishi A. Y (1989). *Introduction to Phonology for Non-Native Speakers of English*. Tema: Sakumo Ltd. Kropp-Dakubu, M. E. (2002). *Ga Phonology*. Legon: Institute of African Studies.
Additional reading list for Dangme	Adi, D. B. (2003). *Animosa Sua* (An Outline of Dangme Grammar). Winneba: Teye-Ngua Computers Publications. Akpanglo-Nartey, J. N. (1989). *A Phonetics Course for Non-Native Speakers of English*. Tema: Sakumo Books. Akpanglo-Nartey, J. N. & Al-Arishi A. Y (1989). *Introduction to Phonology for Non-Native Speakers of English*. Tema: Sakumo Ltd. Caesar, R. O. (2016). *Dangme Animosa.* Accra: Moonlight Press. Caesar, R. O. & Adi, D.B. (2007). *Dangme Fonɛtiks kɛ Fɔnɔlɔji (An Introduction to Phonetics and Phonology of Dangme).* Kumasi: Alpha and Omega Publications. Dakubu Kropp, M. E. (1987). *The Dangme Language*. Accra: Unimax Publishers Limited.
Additional Reading list for Fante	Abakah, E. N. (2008). *Akan Fɔnɔlɔgye*. Cape Coast: Old Thomas Printing Press. Akpanglo-Nartey, J. N. (1989). *A Phonetics Course for Non-Native Speakers of English.* Tema: Sakumo Books. Agyekum, K. (2010). *Akan Kasa Nhyehyɛɛɛ*. Accra: Dwumfour Ghana Limited. Boadi, L. A. (2003). *Some Affixes of the Volta-Comoe Languages*. Accra: Black Mask. Dolphyne, F. A. (2006). *The Akan (Twi – Fante) Language: Its Sound Systems and Tonal Structure.* Accra: Woeli Publishing Services. Osam, E. K. (2003). *Introduction to the Structure of Akan: Its Verbal and Multi-Verbal System*. Accra: Ghana Universities Press. Roach, P. (2000). *English Phonetics and Phonology, (3rd ed.).* Cambridge: Cambridge University Press. Tallerman, M. (1998). *Understanding Syntax*. New York: Oxford University Press.
Additional reading list for Twi	Abakah: E. N. (2008). *Akan Fɔnɔlɔgye*. Cape Coast: Old Thomas Printing Press. Akpanglo-Nartey, J. N. (1989). *A Phonetics Course for Non-Native Speakers of English.* Tema: Sakumo Books. Agyekum, K. (2010). *Akan Kasa Nhyehyɛɛɛ*. Accra: Dwumfour Limited. Boadi, L. A. (2003). *Some Affixes of the Volta-Comoe Languages*. Accra: Black Mask. Dolphyne, F. A. (2006). *The Akan (Twi – Fante) Language: Its Sound Systems and Tonal Structure.* Accra: Woeli Publishing

	Services. Osam, E. K. (2003). *Introduction to the Structure of Akan: Its Verbal and Multi-Verbal System*. Accra: Universities of Ghana Press.
Additional reading list for Ewe	Akpanglo-Nartey, J.N. (2002). *A Phonetic Course for Non-Native Speakers of English* (2nd Edition). Tema: SAKUMO Books. Akpanglo-Nartey, J. N. (2006). Application of Phonetics in Language Education in Ghana. *UEW Papers In Applied Linguistics*, No. 1: pp. 1-7. Akpanglo-Nartey, J.N. & Akpanglo-Nartey, A. R. (2006). *Introduction to Phonology for Non-Native Speakers of English.* Tema: SAKUMO Books. Amegashie, S. K. (2000). *E3egbe ŋ4`l4a*. Accra: Mensby Printing Works. Azah, A. K. (1989). *The Verbal Noun in Ewe Accra.* Language Centre Library University of Ghana. Clark, J. & Yallop, C. (1990) *An Introduction to Phonetics and Phonology.* Basil Blackwell Ltd: Great Britain. Duthie. A. (1996). *Introducing Ewe Linguistic Patterns.* Accra: G.U.P Accra Essegbey, J (2002). *The Syntax of Inherent Complement Verbs in Ewe*. Edited by F.K. Ameka et al. University of Ghana, Legon. Gbegble, N. (2005). A spectrographic analysis of Ewe vowels. *UEW Papers In Applied Linguistics*, No. 1: pp. 94-174. Obianim, S.J. (1999). *E3egbe ŋuti Nunya Akpa I*. Accra: Sedco Publishing Limited Ofori, A.G. (2002). *Nominalisation in Ewe*. Language Centre. (New Directions in Ghanaian Linguistics)
Additional reading list for Dagaare	Bemile, S.K. (1984). *'Dàgàrà Phoneme Contrasts.' Vol.2.* Saarbrüeken: Africana Saraviensia Linguistica. Bemile, S.K. (1983). *'Dàgàrà Phoneme Contrasts.' Vol.1.* Saarbrüeken: Africana Saraviensia Linguistica. Bodomo, Adams. ((2004). *A Dgaare-Cantonese-English Lexicon for Lexicographical Field Research Training*. Cologne: Rudiger Koppe Verlag. Bodomo, A.B. (2000). *Dagaare*. Muenchem: Lincom Europa. Bodomo, A.B. (1997). *The Structure of Dagaare*. Stanford: CSLI Publications. Bodomo, A.B. (1989). 'A study of Dialectal Variation in Dagaare: MA. Dissertation. Department of Linguistics, Legon. Dorzie, G. B. (2012). *The Dagaare Pronominal System*. MPhil. Thesis. UEW. Naden, T. (1988). 'The Gur Languages' In M. E. Kropp Dakubu (ed.) *The Languages of Ghana.* London: KPI. Nyekanga, V.B. (2012). Some Words Formation Processes in Dagaare. Mpil Thesis. UEW. Saanchi, J.A.N. (2003). 'Aspects and the Dagaare Verb.' *Gur Papers/Cahier Voltaïques* 6,101-106. Saanchi, J.A.N. (1997). 'The Vowel System of Dagaare.' *Gur Papers/Cahier Voltaïques* 2, 129-135. Saanchi, J.A.N. (1980). 'The Nominal Phrase in Dagaari'. Long Essay. Department of Linguistics: University of Ghana.
Additional reading list for Kasem	Awedoba, A. K. (1993). *Kasem Studies Part 1: Phonology and Phonetics.* Accra: I.A.S. Legon. Awedoba, A. K. (2002). *Studies in Kasem Phonology and Phonetics.* Accra: I. A. S. Legon.
Additional reading list for Kusaal	Agoswin, A. M. (2010). *Aspects of Kusaal Phonology*. MPhil Thesis, University of Ghana. Akpanglo-Nartey, J. N. (1989). *An Introduction to Linguistics for Non-Native Speakers of English.* Tema: Sakumo Books. Akpanglo-Nartey, J. N. (1989). *A Phonetics Course for Non-Native Speakers of English.* Tema: Sakumo Books. Boadi, L. A. (2003). *Some Affixes of the Volta-Comoe Languages.* Accra: Black Mask.

	Hasiyatu, A. (2011). *Object Sharing as Symmetric Sharing in Kusaal*. MPhil thesis, University of Tromso. Schaefer, D. & Schaefer, N. (2012). The Phonology of Kusaal. Tamale: GILLBT.
Additional reading list for Gurenɛ	Akpanglo-Nartey, J. N. (1989). *A Phonetics Course for Non-Native Speakers of English.* Tema: Sakumo Books. Boadi, L. A. (2003). *Some Affixes of the Volta-Comoe Languages*. Accra: Black Mask. Herbert, R. K. (Ed.). (1997). *African Linguistics at Crossroads: Papers from Kwaluseni*. Köln: Rüdiger Köppe. Katamba, F. (Ed.). (1994). *Lincom Studies in African Linguistics.* Munchen, Newcastle: Lincom Europa. Mutaka, N. (2000). *An Introduction to African Linguistics*. Muenchen: Lincom Europa.
Additional reading list for Gonja	Afari- Twako, H.K. (2001). *Alɔntorwor Nɛ Ngbabembra*. Tamale: Syber, Systems. Akpanglo-Nartey, J. N. (1989). *A phonetics course for non-native speakers of English.* Tema: Sakumo Books. Ameka, F. K. & M. E. K. Dakubu (Eds.). (2008). *Aspect and Modality in Kwa Languages*. Amsterdam: John Benjamin Publishing Company. Boadi, L. A., Grieve B., & Nwankwo, G. B. (1968). *Grammatical Structure and its Teaching*. Ibadan: Universities of Nigeria Press. Dramani, D. (2011). *Word formation Processes in Gonja*. M.A Thesis, University of Ghana. Painter, C. (1970). *Gonja: A phonological and grammatical study*. Bloomington: Indiana University Press.
Additional reading list for Dagbani	Abdul-Rahman, F. (2006). A Spectrographic Analysis of Dagbani Vowels. *Working Papers in Applied Linguistics*, University of Education, Winneba**.** Sakumo Books. Adam, P. P. (2007). *Some Word Formation Processes in Dagbani*. M.Phil thesis, University of Education, Winneba. Alo, S. A. (1999). *Fonoloji Tuma Soya.* B. Ed Long Essay, Department of Gur-Gonja Education, UEW. Hudu, F.A. (2002). Phonological Integration of English-Dagbani Loanwords, BA thesis, Department of Linguistics, University of Ghana, Legon. Issah, Samuel A. (2008). *Information Packaging in Dagbani*. M.A. Dissertation, University of Tromsø . Issah, A. S. (2006). *Some Phonological Processes in Dagbani, A constrained-based account*. Ms, University of, Norway. Issahaku, A. (2007). *English Loan Words in Dagbani*. Unpublished MPhil. Thesis, UEW Olawsky, K.J. (1999). *Aspects of Dagbani Grammar-with special emphasis on phonology and morphology*, PhD Dissertation; Munich: LINCOM EUROPA. Rahman, F. (2013). Elision in Dagbani. *International Journal of Linguistics, 5 (1),* 219-230. Wilson, A. A. (1972). *Dagbani: An Introductory course*. Tamale: GILLBT

CONTEXT

Literature plays a key role in language learning but it is de-emphasised in the educational system. Most language teachers think literature is for the higher levels. There is the misconception that literature is difficult and belongs to learners at the advanced level in education (JHS and SHS). Literature develops in learners in the Upper Primary's love and passion for life-long reading, develop cognitive skills and nurtures growth and development of learners' personality and social skills but these values are lost because we do not teach our learners literature at Upper Primary level. This is so because teachers are not trained to teach literature at the Upper Primary level. In addition, there are not enough literature materials in schools. In a nutshell, literature is neglected in Upper Primary. There is therefore the need to train teachers who can teacher literature to make their learners appreciate it in their learning process.

Course Title	**Introduction to Literature in English**						
Course Code		**Course Level: 200**	**Credit value: 3**				**Semester 2**
Pre-requisite	Introduction to English Language						
Course Delivery Modes	✓ **Face-to-face**	✓ **Practical activity**	✓ **Independent Study**	✓ **Work-based learning**	✓ **Seminar**	✓ **E-learning Opportunities**	**Practicum**
Course Description	This course introduces all student teachers to English literature. The course covers the three main genres of literature - prose, poetry and drama. The purpose of the course is to equip student teachers with the tools and skills that are needed to interpret and analyse different literary texts. The course will examine language as an artistic medium with aesthetic principles that shape not only literary works, but also embody core values and principles such as honesty, truthfulness and respect. The structures, types and forms of the different genres of literature will also be highlighted. The introduction to each genre will be followed by a practical analytical and interpretation component using different texts. The course is designed to equip student teachers with literary skills to enable them to teach literature knowledge to their pupils, and to teach them how to apply this knowledge in their reading, interpretation and analysis of literary texts. Teaching strategies such as discussion, brainstorming, group work will be used to deliver the course. Modes of assessment of learning, as learning and for learning will include: presentations, performances, dramatization, recitals, role-play, writing exercises, text analysis, group-based projects and text reviews (NTECF p.16, 24, 25, 26; NTS3k: 14).						

Course Learning Outcomes	Learning Outcomes: On successful completion of the course, student will be able to	Indicators
	1. Demonstrate basic knowledge and understanding of English Literature	• Define Literature • Identify and differentiate • between the various forms/genres of literature • Explain the characteristics • of the different forms/genres of English literature
	2. Demonstrate knowledge and understanding of the elements of the major genres of English literature	• Identify and explain the elements of • poetry • Identify and explain the • elements of prose • Identify and explain the • elements of drama
	3. Apply the knowledge and understanding acquired in literature to analyse given literary texts	• Interpret and analyse a poem with respect to the use of imagery, rhyme, rhythm, sound devices and figurative language • Interpret and analyse prose • texts with respect to plot, point of view, theme, and • character (- isation) • 3.3 Explain and analyse a dramatext with respect to plot, action, character(-isation) anddramatic techniques.
	4: Use appreciation of literature as lense through which to connect values to human nature and human situation.	• Connect literary works and real • life experiences • Exhibit values such as honesty, truthfulness and respect in their dealings with colleague student teachers and others, and in their presentations ofassignments and projects.

Course Content	Units	Topics:		Teaching and learning activities to achieve learning outcomes
	1	Introduction to literature	Introduction to literature 2. Definitions and forms ✓ Genres of literature - Oral Literature ✓ Characteristics of prose/poetry/drama	• Discussion of the definitions and forms of literature • Identification of different forms of literary works (poem, prose, drama) • Illustration of oral literature from student teachers' own socio-cultural contexts. • Use of technology to exemplify different genres of literature as they occur in real life.
	2	Introduction to Poetry	What is poetry? Form and Structure of Poetry Types of poetry Narrative Poems Lyrical Poems Didactic Poems Descriptive Poems Elements of Poetry Imagery Rhyme Rhythm Stanza Tone Figurative language Sound Devices	• Discussion of the definitions, forms and types of poetry • Identification of elements of poetry in sample poems • Use of ICT tools, where necessary, to find examples of different forms and types of poetry. • Performance of different poems in class. • Conducting internet-based research for sample poems

	3	Interpretation and analysis of poetry	recommended texts	Povision of sample texts of poetry Interpretation and analysis sample poems (with respect to the use of imagery, rhyme, rhythm, sound devices and figurative language)
	4	Drama	What is Drama? Nature of Drama Types of Drama • Comedy • Tragedy • Tragi-comedy Elements of Drama • Character • Plot • Action • Setting • Theme • Dialogue Dramatic Techniques • Suspense/foreshadowing • Comic Relief/Flash back/Dramatic Irony	• Description of the nature of drama • Illustration of different types of drama with short stories • Explanation of the elements of drama • Identification of elements of drama in the sample texts • Watching selected drama episode (s) on television and discussing observations and experience in class
	5	Interpretation and analysis of Drama	Recommended texts	Interpretation and analysis of sample drama texts (with respect to plot, action, character(ization) and dramatic techniques)

	6	Prose –Fiction	What is Prose? What is Fiction? Types of Fiction • Novels • Mystery • Detective Stories • Romance • Short Stories • Historical Fiction Characteristics of Prose fiction Types of Prose fiction • Fable/ Allegory/ Romance ✓ Short story/Novella/ The Novel Elements of Prose • Plot • Theme/Subject Matter • Character and characterisation • Point of view • Mood • Setting Literary terminology	• Explanation of the definitions and types as well as characteristics of prose-fiction • Explanation of the elements of prose-fiction and literary terminologies. • Reading and identification of elements of prose-fiction in sample texts

	6	Prose: Non-Fiction	Essays Autobiographies Biographies Travel and Adventure Criticisms Speeches Journal Articles	• Discussion of the differences between fiction and non-fiction prose • Illustration of the types and characteristics of non-fiction prose • Reading of different non-fiction prose texts • Encouragement of student teachers to identification of the difference among them.
	7	Interpretation and analysis of Prose (fiction and Non-Fiction)		Presentations (student teachers to give group presentations based on their interpretation and analysis of prose texts (with respect to plot, point of view, theme, character (-ization) etc.)
Course Assessment	**Component 1: Group work - Assessment as/of learning (40%)** Students (in groups) to adapt a prose text into a drama text and perform it (CLOs 2, 3). Core Skills: Creativity, innovation, critical thinking, team work and collaboration **Component 2: Independent work - Assessment for learning (30%)** Student teachers to either perform selected poems in class or watch a drama production/performance and write a brief critique that analyses elements of drama (CLO 3). Core Skills: Creativity, analysis and evaluation, critical thinking **Component 3: Written Examination- Assessment of learning (30%)** A written examination that will test student teachers'knowledge and understanding in the types, forms/structure, characteristics, similarities and differences among poetry, drama and prose (CLOs 1, 2). Student teachers to be observed as they work in teams to ascertain whether or not they demonstrate values such as honesty, respect for one another, tolerance and truthfulness (CLO 4). (CoreSkills targeted: Knowledge, critical thinking)			
Instructional Materials	Books (poetry, drama, prose texts), television set, computer (YouTube videos/audios).			
Required Text (Core)	Abram, M. A. (1999). *A glossary of literary terms*. Boston: Cencage Learning. Gyasi, I. K. (1988). *Ordinary level English literature*. Tema: Ghana Publishing Company. Senanu, K. E. & Vincent, T. (1976). *A selection of African poetry*. London: Longman.			

Additional Readings	Cook, D. (1977). *African literature: A critical view*. London: Longman. Eghagha, H. (2001). Introduction to drama In *The English Compendium*. LekeFakoya& Steve Ogunpitan (Eds). Lagos: Department of English, Lagos State University. Meyer, M. (2010). *Bedford introduction to literature: Reading, thinking, writing*. Bedford: St Martins. Moody, H. (1972). *The study of literature*. London: George Allen & Unwin.

Mathematics /Numeracy

CONTEXT

While the vast majority of children in Ghana are enrolled in school, far fewer are learning. Evidence from national and international assessment (NEA, EGRA & EGMA) show over 75% of children in upper primary in Ghana failed to carry out reading and mathematics tasks which most children at this age are expected to know, understand and be able to do. The low performance is largely as a result of how mathematics is taught by teachers which, in turn, is informed by a teacher education programme that appears irresponsive of the imperatives of the upper primary curriculum. The current DBE curriculum is weighted heavily towards subject-content knowledge to the detriment of curriculum space for developing understanding of pedagogy and practical classroom teaching skills. There is also disconnect between the pre-service DBE curriculum and the upper primary curriculum. Also, mathematics is taught without recognition of the diverse needs of learners.

Given the incredible power that teachers hold to making a difference to pupils' mathematical development, a reasonable point of entry for changing the narrative is a teacher education curriculum that is reflective of the exigencies of today's upper primary numeracy classroom. This course plays an important role in this regard. The course is intended to address the foregoing issues by providing student teachers opportunity to develop a comprehensive understanding of the upper primary curriculum. Emphasis is placed on strategies for teaching and assessing student teachers acquisition of mathematical concepts and pedagogies relating to number and number sense as well as identifying student thinking and understanding and correcting mathematical misconceptions. When student teachers are familiar with and have solid understanding of the teaching and assessment requirements in upper primary curriculum, it can shape their classroom practice and augment efforts to improve learning outcomes.

Course Title:	**Teaching and Assessing Mathematics for Upper Primary (Introductory)**										
Course Code		**Course Level**		**200**			**Credit value**	**3**	**Semester**	**2**	
Course Delivery Modes *(Please, double click and check)*	**Face-to-face** ☒	**Practical Activity** ☒		**Work- Based Learning** ☒	**Seminars** ☒		**Independent Study** ☒	**e-learning opportunities** ☒		**Practicum** ☒	
Pre-requisite	**Theories in the Learning of Mathematics**										
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	In this course, student teachers will develop an understanding of the Ghanaian Curriculum for Change and Sustainable Development: Numeracy Standards for P4-P6. They will use the knowledge of theories in early learning and teaching of mathematics to enable them to conceptualise, plan and design learning, teaching and assessments. They will consider a range of strategies including play-based and inquiry learning as well as interpret student thinking and diagnose misconceptions to improve student learning. They will also explore the linkages with literacy, numeracy and ICT and develop their pedagogical content knowledge in upper primary numeracy teaching. Topics covered in this course include the curriculum, standards-based versus objective-based curriculum; counting and number relationships; place value 10 to 1,000, addition and subtraction: numbers within 99; shape, space and										

	measurement; college-based classroom micro lessons; using technology to teach number sense and operations sums within 99). A combination of face-to-face sessions, practical activities, independent study, seminars and e-learning opportunities will be used to deliver the course. Differentiated approach to teaching will be used to ensure that student teachers will be supported in the area of teaching and assessing upper primary mathematics. The course will focus on *mathematical content* on one hand and the *strategies and learning experiences in doing mathematics* on the other hand. These will be combined to form an integrated instructional approach that addresses the course learning outcomes. The instructional strategies will pay attention to all learners, especially girls and students with Special Education Needs. The course will be assessed using a variety of assessments methods including coursework, assignments, quizzes, project works with presentation and end of semester examination to provide a comprehensive outlook of student teachers competencies and skills.(NTECF, p. 21, 45); (NTS 1a, 1f, 2b, 2c, 2e, 2f, 3j, 3m)	
Course Learning Outcomes (CLOs) with NTS References and indicators	**Course Learning Outcomes**	**Indicators**
	On successful completion of the course, the student teacher will be able to: **1. Demonstrate a comprehensive knowledge and understanding of the official P4-P6 mathematics curriculum and learning outcomes covering counting and number relationships; place value 10 to 1,000, addition and subtraction: numbers within 99; shape, space and measurement, as well as the principles behind these by** (NTS 2b)	• Demonstrate conceptual understanding and fluency in carrying out addition and subtraction, using mental and other strategies for adding and subtracting within 20 • Demonstrate a good understanding of whole number relationships and place value 10 -1,000 as well as using techniques of mental mathematics and estimation for addition and subtraction: numbers within 99 to compute fluently • Show a good grasp of the core knowledge required to teach counting and number relationships; place value 10 to 1,000, addition and subtraction: numbers within 99; shape, space and measurement • Participate in activities that can make children mathematically proficient; that is, understand mathematical ideas, compute fluently, solve problems, and engage in logical reasoning • Design activities that can make children mathematically proficient using multiple strategies that are appropriate for a specific concept • Express and justifying their mathematical thinking in at least one Ghanaian language and evaluating the reasoning of others • Develop interest in learning mathematics and having confidence in their abilities to do mathematics

	2. Demonstrate knowledge of instructional practices for teaching P4-P6 mathematics curriculum (NTS 2b, 2c)	• Carry out basic mathematics instructional routines for beginners, mental drills, reinforcement activities and new learning activities • Identify and design tasks for teaching important mathematical ideas in number to beginners, • Justify and explain one's instructional practices and in reflecting on those practices so as to improve them • Plan effective instruction and solve problems that arise during instruction
	3. Use manipulatives and TLMs including ICT in a variety of ways in teaching mathematics concepts (NTS, 3j)	• Identify a variety of manipulatives and TLMs for teaching important mathematical ideas in number to beginners, • Use manipulatives and TLMs in establishing mathematical principles. • Use ICT as a tool in supporting beginners in learning number • Solve mathematics problems using manipulatives and/or technology related strategies in a variety of ways.
	4. Demonstrate understanding of syllabus guidelines for classroom assessment and skills of effective assessment for teaching mathematics in the specialism including design an assessment tool with the rubrics (NTS 2b, 3l, 3m).	• Explain syllabus guidelines for classroom assessment for learning (AfL), assessment of learning (AoL) and assessment as learning (AaL • Explain the steps and strategies involved in designing a good assessment tool • Design an assessment tool with the rubrics for assessing mathematics learning in upper primary • Design and implement appropriate differentiated instructions and remediation in upper primary (i.e. Do action research) • Design simple assessment tasks to measure whether pupils have met each benchmark or milestone
	5. Demonstrate value as well as respect equity and inclusivity in the mathematics classroom by (NTS, 1f)	• Appreciate the contributions of, and supports, colleagues in the mathematics classroom. • Cooperate with colleagues in carrying out mathematics tasks. • Engage in reflective thinking about how mathematics was taught in student teachers basic school days. • Use adaptive TLMs and appropriate teaching strategies to support pupils with SEN

	6. Demonstrate awareness of socio-cultural issues in teaching and learning mathematics in the content domains ([NTS, 2f)	• Identify and addressing socio-cultural issues emerging from teaching and learning geometry and statistics • Address Socio-cultural issues emerging from the teaching and learning of mathematics.

Course content	**Unit**	**Topics**	**Sub-topics/theme (if any)**	**Teaching and learning activities to achieve learning outcomes**
	1.	The mathematics curriculum	What is curriculum; Standards-based versus objective-based curriculum; aims and competencies of school mathematics	Discuss and study the NACCA's standards-based objective-based curriculum; Conduct examination of official curricula for P4 to P6 Use students' presentation on why teach mathematics in the P4-P6 years
	2.	Counting and Number relationships	Counting and representing numbers in multiple of ways; in both English and a Ghanaian language; problem-solving and investigation	Use verbal exposition and discussions on counting activities (supported with video clips and TLMs): – counting or comparing groups of up to 9 objects and then up to 19 objects – matching and assigning numbers to given groups of objects (fingers, number cards, numeral cards, etc.) – skip counting to 1000 by 2s, 5s, 10s, 25s and 100s, starting at a multiple of these numbers – problems involving the relative size of numbers or comparing – Playing mental games
	3.	Place value	Counting and representing numbers in multiple of ways including place value; in both English and a Ghanaian language; problem-solving and investigation	Demonstrate place value using base ten structured materials i.e. 100s, 10s and 1s, (bundled/loose sticks; a flat, long, and unit lego-blocks; flat, strip and loose square cut-outs; etc.) using both English and a Ghanaian language;

				Represent and counting numbers (10 to 999) using multiple of base ten structured materials (in both English and a Ghanaian language)
	4.	Addition of whole numbers up to 99	1-digit and 2-digit addition as putting together, counting on; Mental strategies - friendly jumps, making doubles, composing numbers, constant difference, decomposing numbers, etc.; problem-solving and investigation	Use manipulatives to demonstrate addition as putting together; and addition as counting on. Act out a simple addition situation and applying 'counting all' strategies to model an addition and solve a simple, everyday addition problems within 20. Demonstrate fluency in mental addition strategies (sums within 9; and then sums within 20) Demonstrate ability to add two 2-digitsnumbers using mental strategies (sums within 99), e.g.
	5.	Classroom assessment in mathematics in the Upper Primary	Syllabus guidelines for classroom assessment; Effective assessment skills Design of assessment tools and rubrics.	Use verbal exposition and discussion on purposes of different forms of assessment in mathematics learning in upper primary - assessment for learning (AfL), assessment of learning (AoL) and assessment as learning (AaL) as well as syllabus guidelines for classroom assessment; Conduct discussions (supported with video clips) on various forms of assessment tool – observation guide, questionnaire, interview protocol, tests (i.e. e.g. National Educational Assessment (NEA), performance assessment.) - one-on-one tests (viz. multiple choice, constructed response), group tests, focus group interview protocol, etc.), as well as how they are administered. Design a test by working at each of the following steps: purpose, format, test blue-print, writing well-defined questions one after the other with answers.

				Evaluate some teacher made tests to see if they meet the following five criteria of a good test: clarity, validity, practicality, efficiency and fairness
	6.	Micro lessons and use of technology across upper primary mathematics	Importance of lesson planning Micro lesson planning formats Design of micro lessons Engagement in micro teaching with peers Exploration of technology use in the Upper Primary	Engage in verbal exposition and discussions on importance of lesson planning, micro lesson planning formats and technology use in teaching numeracy across upper primary Read teaching scenarios (and/or watch video clips) on teaching numeracy in the Upper Primarys and doing a critic based on using mathematical learning theory and knowledge of curriculum content, pedagogy and resources to critique a mathematics lesson Engage in micro lesson design, teaching with peers and doing critics Observe and reflect upon how mathematics lessons are currently taught in schools
	7.	Subtraction of whole numbers up to 99	1-digit and 2-digit subtraction as removing or take a part; counting down and mental strategies: difference, friendly jump, making doubles, compensation, decomposing numbers, constant difference; problem-solving and investigation	Use manipulatives to demonstrate subtraction as move (or take a part) strategy Model a simple subtraction situation and applying 'move (or take a part) strategies to model subtraction and solve a simple, everyday subtraction problems within 20. Demonstrate proficiency in mental subtraction strategies (sums within 9)
	8.	Shape, space and Measurement	2-D shapes and 3-D objects; characteristics of 2-D shapes and 3-D objects; Relationships among and between 2-D shapes and 3-D objects; Measure lengths using arbitrary units (or referents) and standard measurements; problem-solving and investigation	Describe the common features or attributes of a collection of 2D and 3D shapes Sort a collection of 2D shapes by 1 or 2 features or attributes and explaining sorting rule used (repeat for 3D); Identify examples of 2D and 3D shapes in classroom and community. Demonstrate linear measurement using

				repeated, non-standard units (i.e. hand-span, finger, bottle tops, sticks, etc. for length) and engage in verbal exposition and discussions on need for standard units. Measure sizes of 2D and 3D shapes using standard units.
Course Assessment	**Modes of Assessment of Indicators**			
	Component 1: EXAMINATION **Summary of Assessments Methods:** teachers should be assessed on conceptual understanding and fluency in carrying out tasks in number and numeration systems, integers, fractions,, rational and irrational numbers, addition and subtraction, using mental and other strategies for adding and subtracting within 99 the core knowledge required in teaching number and numeration systems, integers, rational and irrational numbers, fractions, **Weighting:40%** **Assessing Learning Outcomes:**(NTS 2b); CLOS: 1, 4 & 5			
	COMPONENT 3: Coursework 2 **Summary of Assessments Methods:** *Self/Peer Assessment*: Student teacher should conduct self or peer assessment on their enjoyment and confidence in doing mathematics appreciation of the contributions and support of colleagues in the mathematics classroom cooperation with colleagues in carrying out mathematics tasks. Student teacher should also engage in reflective thinking about how mathematics was taught in student teachers basic school days *Diagnostic Assessment:* Student teachers should conduct self-assessment on their conceptual understanding and fluency in carrying out tasks in number and number operations; the core knowledge required in teaching number and numeration systems, integers fractions, rational and irrational numbers, shape and space and handling data. **Weighting:20%** **Assessing Learning Outcomes:** (NTS 2f; NTECF 39); CLO 1 & 5			
Instructional Resources	Maths Posters Journal Articles and Position Papers Manipulatives and Visual Aids Computers			

Required Text (Core)	Martin, J. et. al. (1994). Mathematics for Teacher Training in Ghana: Tutor Notes & Students Activities [Chapter 2]. Accra Unimax Publishers. [pp].
Additional Reading List	Ministry of Education (2018). *Primary School Mathematics Standards*. Accra: Ministry of Education. Paling, D. (1982). *Teaching mathematics in primary schools.* Oxford: University Press

Science

CONTEXT

Several interventions have been initiated by government to promote the teaching and learning of science in schools, as science is the gateway to industrial and technological growth. Unfortunately, science education in Junior High School education still faces innumerable challenges including financial constraints, lack of science equipment, chemicals, low commitment and apathy on the part of teachers, parents, as well as inadequate infrastructure.

Another major challenge is the lack of qualified science teachers at the Junior High School level. Also, teachers possess low ICT competency levels and are unable to integrate ICT into the teaching and learning process is in science. The belief is that there are cultural practices and prejudices that invariably prevent girl participation in science. The belief is that STEM subjects are for boys and home economics is for girls.

The learning activities for this semester seeks to relate science to the learners' environment, make science culturally relevant and inclusive. It also seeks to promote professional scientific attitudes and skills development such as critical thinking, honesty, patience, sincerity, precision, and accuracy. Sensitive concepts shall be explained within the appropriate local dialect and/or practices, in order to remove barriers that could prevent students of diverse abilities and strengths from participating in any science lesson, as well as managing transition from early childhood (B3) to middle childhood (Upper Primary).

Course Title	**Integrated Science II for Upper Primary**						
Course Code		**Level 200**	**Credit value: 3**		**Semester 2**		
Pre-requisite	Students teachers must have done SCE 211						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description	The second part (year two, semester 2) of the integrated science course uses the universal design for learning approach to extend the basic science concepts of the student teacher on the following content areas: Sources of energy, Forces, Care of the Skin, Solar System and Mixtures. Appropriate pedagogies, such as Talk for learning approaches, demonstrations, nature walk, concept mapping, problem-based teaching /learning, and video presentations shall be employed. Also, authentic assessment modes, such as concept mapping, using checklist to identify values and attitudes, report writing from field trips and nature walks, as well as mind maps shall be employed. The course emphasizes on essential attitudes and values of professionalism in teaching science such as honesty, carefulness and accuracy to ensure that all activities are mindful of every child's right to education. The student teacher, in this course, continues to develop the portfolio and is introduced to organisation of upper primary integrated science curriculum, Supported Teaching in School (STS), as well as managing transition from early childhood (B3) to middle childhood (Upper						

	Primary)lesson planning and how to identify science resources for science teaching during Supported Teaching in School (STS). The teacher must also be able to identify special strengths of ALL learners for the purposes of inclusivity and equity. (NTS, 2c, 2b, p. 13, NTS, 1c 12)	
Course Learning Outcomes	**Outcomes** On successful completion of the course, Student teacher will be able to:	**Indicators** Indicators to show outcomes are achieved
	1. Explain the concept of energy and identify some sources and forms of energy (NTS 2c, p.13 & 21)	• Provide evidence of knowledge of concept of energy and sources of energy • Provide concept map on sources, forms and uses of energy and conversion of energy
	2. Demonstrate different types of forces and describe their effects in everyday life activities (NTS 2c, p.13 & 21), (NTS, 14, 19 & 23)	• Present a chart on different types of forces and their corresponding effects in everyday life activities • Produce a chart on different types of forces and their effects in everyday life situations.
	3. Identify diseases of skin and describe how the disease can be prevented. (NTS 2c, p.13 & 21)	• Provide a concept map to show common diseases of the skin and their corresponding prevention. • Provide evidence that they have considered possible learners' unscientific cultural beliefs about causes of skin diseases.
	4. Identify appropriate methods for separating mixtures encountered in everyday activities (NTS 2c, p.13 & 21)	• Provide evidence of local technologies of separation of mixtures encountered in household kitchen and indigenous/local industries
	5. Critically review organisation of the upper primary integrated science curriculum as well as its implication for integrated science teaching and learning, and demonstrate significant ability to design and engage in Micro Science (MS) practical activities and other alternative interactive assessment practices. (NTS 3a, 3h, p14: NTS 2c, 2d, 2e, p13 & 21)	• Provide a report to show a clear evidence of understanding of the components of the upper primary integrated science curriculum. • Produce a lesson plan based on the content of the teaching syllabus for integrated science for upper primary • Develop a mini MS activity model for pupils' use.

Course Content	Units	Topics:	Sub-Topics (if any)	Teaching and Learning activities to achieve learning outcomes
	1	**Energy**	1.1 Meaning of energy and sources of energy: food, sun, wind, water, battery, crude oil and natural gas 1.2 Forms and conversion/ conservation of energy 1.3 Uses of solar energy: heating and burning	• In a mixed ability/gender based group use brainstorm to come out with definition of energy and the sources of energy • Demonstration on conversion/transformation of different forms of energy • Practical activities/ video presentations on the uses of solar energy in an inclusive, multi-grade, and developmentally appropriate classrooms.
	2	**Forces**	2.1 Meaning of force and examples of forces: frictional, elastic, magnetic, gravitational, compression and uses of forces 2.2 Effects of forces on objects	• Simulations and multimedia presentations on types and uses of forces (ensure that different abilities and strengths/needs are catered for to ensure a safe working environment and equal opportunities). • Practical activities on the application of force in everyday life in an inclusive eg. the use of soccer/football in demonstrating types of forces in multi-grade, and developmentally appropriate classrooms
	3	**Care of the skin**	3.1 Diseases of the skin: ring worm, eczema, chicken pox, measles 3.2 Prevention of skin diseases 3.3 Misconception about skin diseases	• Shower thoughts/ a mixed ability/gender based group discussions to arrive at causes and examples of skin diseases. • 3.2.1 Open-questions to come out with preventive measures against skin diseases in an inclusive, multi-grade, and developmentally appropriate classrooms. • Open-ended questions to elicit misconceptions/incorrect ideas about physical quantities.
	4	**The Solar system**	4.1 Components of the solar system: sun, moon earth and other planets	• Video presentation on the solar system to facilitate identification of components of solar system (ensure that different abilities and strengths/needs are catered for to ensure a safe working environment and equal opportunities).

			4.2 Movement of the moon around the earth 4.3 Relative positions of the sun, moon and the earth 4.4 Luminous and non-luminous bodies 4.5 Satellites and uses of satellites	• Simulations and multimedia presentations (using ibox) on the movement of moon around the earth. • Multimedia presentation to show relative positions of the Sun, moon and earthin an inclusive, multi-grade, and developmentally appropriate classrooms. • Use open-ended questions and shower thoughts to explain and identify luminous and non-luminous bodies. • In a mixed ability/gender based group brainstorm student teachers to come out with the meaning of satellite and use video/simulation illustrate how satellites and their uses
	5	**Mixtures**	5.1 Concept of mixture 5.2 Types of mixtures: Solid-solid, Liquid-liquid, Liquid-solid, Gas-gas, Liquid-gas 5.3 Methods of separation of mixtures	• Use open-ended questions to bring out the definition of a mixture In a mixed ability/gender based group • Practical activities to classify and explain different types of mixture • In a mixed ability/gender based group use concept maps and practical activities to separate different types of mixtures
	6	**Upper primary integrated science curriculum**	6.1 Key features of the upper primary integrated science curriculum	• Discussions on key features of the upper primary integrated science syllabus such as transitional and age-specific requirements (ensure that different abilities and strengths/needs are catered for to ensure a safe working environment and equal opportunities).
Course Assessment	**Component 1**: Summative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Quizzes/Exams/Report writing/Poster/Presentations/ Professional portfolios Core skills to be acquired: Cognitive, literacy, numeracy, writing and reading Weighting: 40% Assesses Learning Outcomes: CLO1, CLO2, CLO3, CLO4 &CLO5			

Course Assessment	**Component 2**: Formative Assessment Practice Summary of Assessment Method:*(Note: Choose one of the following for assessment*) Presentations/Concept Mapping/Practical Activities/ evidence of values learned/Group work/Evidence of equity and inclusivity/transferable skills Core skills to be acquired: Honesty, carefulness, accuracy and tolerance Weighting: 40% Assesses Learning Outcomes: CLO1 & CLO 4
	Component 3: Formative Assessment Practice Summary of Assessment Method : *(Note: Choose one of the following for assessment)* Peer Review / evidence of portfolio/lesson plan and annotations/tutorial meetings with the student to discuss their teaching observation progress and areas for development. Core skills to be acquired: Pedagogical, observational and cooperative skills **Weighting**: 20% **Assesses Learning Outcomes:** CLO5&CLO7
Instructional Resources	Some resources that would be required to successfully enable an inclusive integrated science teaching would be Laboratory equipment, Chemicals, Smartphones, Tablets, Laptops, Desktop computer, Productivity tools (software that allow teachers to work better), Subject based instructional tools/applications, Smart boards, Smart screens, Open ERs – YouTube, projectors and virtual laboratories
Required Text (Core)	Abbey, T. K., Alhassan, M. B., Ameyibor, K., Essiah, J.W., Fometu, E., & Wiredu, M. B. (2008). *Ghana Association of Science Teachers Integrated Science for Senior HighSchools*. Accra: Unimax MacMillan.
Additional Reading List	Abbey, T.K., & Essiah, J.W. (1995). *Ghana Association of Science Teachers Physics for Senior High Schools*. Accra: Unimax Macmillan. Ameyibor, K., & Wiredu, M. B. (2006). *Ghana Association of Science Teachers Chemistry for Senior High Schools*. Accra: Unimax MacMillan. Oddoye, E.O.K, Taale, K. D., Ngman-Wara, E., Samlafo, V., & Obeng-Ofori, D. (2011). *SWL Integrated Science for Senior High Schools: Students Book.* Accra, Ghana: Sam-Woode Ltd Zumdahl, S. S., &Zumdahl, S. A. (2009). *Chemistry.* Belmont, CA: Cengage Learning.

Music & Dance/PE

CONTEXT

The *Policy Documents and Syllabus Analysis for Upper Primary* ***course*** will be taught in a one-three-hour session in each week. Every 3-hour session in a week should be team-taught to promote the inter-disciplinary connections between and amongst various courses. It is recommended that extended evening practices should be required at least 3-days in a week from 3:30pm to 5:30pm each day to practice skills and concepts introduced in-class. This arrangement will allow **Physical Education** and **Music and Dance** course to alternate with **Social Studies** and **TVET**, increase opportunity to respond, and allow student teachers to master the content and address persistent CONTEXT and misconceptions such as:

1. **Physical education sport, music and dance content are not as important as numeracy and literacy content**. The content and the pedagogical experiences will reveal that physical education, sport, dance and music are unique and worthy in their own right and cannot be compared to numeracy and literacy content. It will further reveal that, numeracy and literacy content can be reinforced in physical education, music and dance settings
2. **Physical education, sport, music and dance content lack equity, flexibility, size and space for approach and use.** Policy and syllabi will address issues of size and space for use regardless of the learner's body size, posture, or mobility, left- or right-handed. In fact, making provisions for all manner of learners

Course Title	**Analysis of Policy Documents and Syllabus Analysis for Upper Primary**						
Course Code		**Course Level: 200**		**Credit value: 3**	**SEMESTER 2**		
Pre-requisite	Intersection of Physical Activity Sports, Music and Dance						
Course Delivery Modes	**Face-to-face**[1] ☒	**Practical Activity**[2] ☒	**Work-Based Learning**[3] ☐	**Seminars**[4] ☐	**Independent Study**[5] ☐	**E-learning Opportunities**[6] ☒	**Practicum**[7] ☐
Course Description (indicate NTS, NTECF to be addressed)	The *Policy Documents and Syllabus Analysis* course focuses on exploration and analysis of existing policy and legislative documents pertaining to pre-tertiary education in Ghana. These include analysis of existing syllabi for teaching ***physical education*** and ***music and dance*****.** The course is designed to link up with pedagogical principles and theories of learning in physical education (including Guggisberg, Siedentop, WHO, UN Charter-PE, etc.) and music education (including understanding the works of Kodaly, Dalcroze, Carl Orff, Suzuki, Gordon, Nzewi, Ghana Cultural Policy, etc.). In addition, it will take a look at TLMs, facilities and other resources that promote effective teaching and learning in the disciplines. Furthermore, student teachers will be taken through comprehensive experiences on pedagogical knowledge (PK), pedagogical content knowledge (PCK/TPACK) on one hand and developing positive professional attitudes and values with regards to the teaching of **Physical Education** and **Music and Dance** including inclusion, cross-cutting issues (SEN, diversity, problem solving, financial literacy, digital literacy, open-mindedness, respect for others, etc.) as well as the core values of the NTECF: honesty, integrity, perseverance and grit, teamwork, excellence and citizenry. The specific strategies for delivery will include analysis of documentaries orally and by written report; group presentations orally and by written reports; assessment instrument development project; portfolio building; macro-teaching; singing-along ICT tools assembly patriotic songs and demonstration of						

	fundamental movement patterns with music. The strategies will ensure that all activities are respectful of every child's right to education as well as ensure that all children can learn and benefit from education. Modes of assessment will include summative (40%), formative (40%) and practical work and portfolio building (20%). The course will finally focus on the teacher as a mediator and looking at the students' characteristics as potential barriers to learning. The course addresses the following standards: **NTS** 2c, 2d, 2e, 2f, **NTECF** pp. 16, 20 & 23.	
Course Learning Outcomes	**COURSE LEARNING OUTCOMES (CLO)**	**INDICATORS**
	On successful completion of the course, student teachers will be able to:	
	CLO 1 Demonstrate knowledge and understanding of the analysis of pre-tertiary syllabi; link them up with pedagogical principles and theories of learning in physical/music education as well as knowledge in policy document analysis. (NTS 2c & 2d, NTECF p16., & Early-years, Primary and JHS Music and Dance Syllabuses [EPJMDS])	• Exceed grade level expectations (GLE) in carrying out basic tasks/ exercises/problems in physical education and in music and dance syllabi. • Mention at least how three (3) physical activities (or gestures) relate to music and discuss their cross-disciplinary connections.
	CLO 2 Demonstrate knowledge of physical education and musical equipment and facilities; TLMs; basic integration of ICT into teaching at KG-JHS and build a teaching portfolio. **NTS** 2c & 2d, **NTECF** p16.	• Select the most appropriate method(s), TLMs (e.g., watching documentaries with ICT resources, group presentations, demonstration on instruments, singing-along ICT resources, one-on-one instruction, explaining with simplified physical activities / non-traditional notation and symbols / sport adaptations and justify the selection and interpret the results. • Build a teaching portfolio containing materials such as the pre-tertiary syllabi, song repertoire, song repertoire for aerobics, assessment instrument created by student teachers, child study/action research report, etc.
	CLO 3 Demonstrate in-depth knowledge and understanding of inclusive professional values and attitudes enshrined in the policy documents of NTS, NTE. NTECF AND EPJMDS. (**NTS** 2e & 2f, **NTECF** p16).	• State professional values and attitudes of the physical education and music and dance teacher in the basic schools. • Describe activities you will put in place to inculcate the core values of perseverance and grit, teamwork and excellence, • Describe strategies you will employ to eradicate misconceptions about physical education and the music and dance disciplines.

Course Content	Units	Topics	Sub-topics	Teaching and learning strategies
	1	Upper Primary PE/Music Syllabi & policies	1. Upper Primary syllabi 2. Principles and theories of universal design of instruction	**Analysing of Pre-tertiary PE/Music Syllabi** Analysis of syllabi; connections and implications for professional practice (PK and PCK) and ethos of the work place. **Small group discussion & presentation**: Discuss policy documents and syllabi in small groups, produce a report and present to class
	2	Music/PE Equipment Facilities and Resources	1. Textbook 2. Workbooks 3. ICT tools 4. Open space 5. fields and pitches	**Analysis of Facilities/Resources**: Student teachers will survey and inventory facilities, equipment and resources. Classify them by state of functionality. Assess documentaries: i-Box, T-TEL resources and YouTube and discuss the elements of music and physical *activity* and connect to pertinent concepts as they relate to the global recommendations. **Analysis of traditional gadgets**—Audio-video player, Cameras, LCD projector and screen; Western and African musical instruments; Electronic instruments. Music Room and Extension teaching areas—shady places, sheds and fields.
	3	Marching and School Assembly Songs	1. Fundamental movement patterns 2. Song repertoire 3. Sing along	**Group Presentation:** Choreographed fundamental movement patterns with music and presentations on meaning and moral values of lyrics of the assembly patriotic songs. **Singing-along ICT Tools**: Watching documentaries from i-Box and YouTube and singing along or singing with a Tutor.
	4	Building of Teaching Portfolio for PE/Music	1. Policy documents 2. Pre-tertiary syllabi 3. Assessment instrument development	**Develop manual and e-portfolios:** Student teachers will develop both manual and e-portfolio to document their learning experiences in this course and beyond.

			4. Child study / Action Research Report	
Course Assessment Educative assessment: of, for, and as learning.	**Modes of Assessment**			
	Component 1: 30% Examination and Quiz CLOs 1, 2, & 3 **(NTS 2c & d; NTECF 16)** **Component 2**: 50% Analysis of Documentaries orally and written report by responding and connecting to physical activities and musical concepts; Group Presentations orally and written reports, assessment instrument development project; portfolio building; macro-teaching. CLOs 1, 2, & 3 **(NTS 2c & d; NTECF 16)** **Component 3:** 20 % Practical Exams, Portfolio Building, Singing-along ICT tools assembly patriotic songs; Demonstration of fundamental movement patterns with music. CLOs 1,2, & 3 **(NTS 2e & f ; NTECF 16)** The three assessment components must ensure all the modes are respectful of every child's right to education, therefore, taking into consideration strategies that reach all manner of learners in the classroom.			
Instructional Resources	A modest recording and playback gadgets in the classroom or music room. 1. Compact Disc (Audio & Video) player with a recording facility (possibly with a detached microphone) 2. Electronic keyboard with synthesizer 3. Computers (Laptops or PCs) for playing back MP3 and MP4 files. 4. Video Camera, LCD Projector and Screen, Tripod and Monitoring Unit (for listening and recording, viewing and reviewing performances) 5. Few African drums (high-pitched, medium pitched, low pitched, master drum, and donno) 6. Cones, markers, whistles, stop watches, stadiometer, bathroom scale, skinfold calipers, tape measure, sit and reach box, heart rate monitors, medicine ball, free weights, dumb bells, rubber bands, goal ball, etc. 7. Balls for soccer, basketball, volleyball, handball, table tennis equipment, badminton equipment, etc. 8. https://youtu.be/_MDrb24vfvM. – '*Sounds from Ghana*.' 9. http://anthemworld.com/U.S.A.html.			
Required Text (core)	**Physical Education** Ghana Education Service (2018). *Pre-tertiary curricular for physical education for basic schools: KG-JHS.* MOE, Accra: National			

	Council for Curriculum and Assessment (NaCCA). **Music Education** Ghana Education Service (2018). *Pre-tertiary curricular for music and dance basic schools: KG-JHS.* MOE, Accra: National Council for Curriculum and Assessment (NaCCA).
Additional Reading List	**Music Education** APA (2011). *Publication Manual of the American Psychological Association*. (6th ed.) Washington DC, NY: American Psychological Association. Brown, T. H. (2005). Beyond constructivism: exploring future learning paradigms. *Education Today*, *2*(2), 1-11. Cain, T. (2004). Theory, technology and the music curriculum. British Journal of Music Education, 21(02), 215-221. Farrant, J. S. (2004). *Principles and practice of education. (2nd ed.).* London: Longman Group UK Ltd. Bekoe, S. O., Eshun, I. & Bordoh, A. (2013). Formative assessment techniques tutors use to assess teacher-trainees' learning in Social Studies in Colleges of Education in Ghana. *Research on Humanities and Social Sciences*, *3*(4), 20-30. De Rijdt, C., Tiquet, E., Dochy, F. & Devolder, M. (2006). Teaching portfolios in higher education and their effects: An explorative study. *Teaching and Teacher Education*, *22*(8), 1084-1093. Ferrance, E. (2000). *Action Research*. Brown University: Northeast and Islands Regional Mereku, C.W.K., Ohene-Okantah, M. and Addo G.W. (2005) *Teaching music and dance in junior secondary schools: a handbook for JSS 1, 2 & 3 teachers.* Accra: Adwinsa Publications. T-TEL Professional Development Programme (2016). *Theme 5: Teaching and Learning Materials (Handbook for Student Teachers).* Accra: Ministry of Education Website: http://oer.t-tel.org. Younge, Paschal Y. (2011). *Music and Dance Traditions of Ghana: History, Performance and Teaching*. Jefferson, NC: McFarland & Company, Inc. **Physical Education** Corbin, C. B., Welk, G.J., Corbin, W. R. & Welk, K. A. (2008). *Concepts of physical fitness: Active lifestyles for wellness (14th Ed*). Boston: McGraw Hill. Ghana Education Service (2017). Physical education and Sports Implementation Guidelines. MOE, Accra: Ghana Education Service Sarpong, E. O., Apaak, D. & Dominic, O. L. (2015). Reported Physical Activity Levels and Equipment Use as Predictors of Body Composition of Members in Ghanaian Fitness Clubs. *Research Journali's Journal of Public Health*. 1, 4: 7-16 Siedentop, D. (2007). *Introduction to physical education, fitness, and sport* (6th ed.). Boston: McGraw-Hill. Online Resources

Supported Teaching in School

CONTEXT
Supported teaching in schools (STS) in year two (2) needs to consider planning, placement and classroom practice of the student-teacher in the following CONTEXT which are likely to impact on the effectiveness of placement and practice:

1 The Language policy issues –some student-teachers have not been trained in the dominant L1 to be used as medium of instruction in their placement schools, especially in the upper primary level.
2 Student-teachers often lack knowledge about cultural practices of some of the communities where they are placed.
3 Student-teachers are not adequately equipped to handle issues on ICT integration, equity and inclusivity as well as differentiated learning.
4 Portfolio assessment, which provides evidence of student-teachers' practice is not included in their overall assessment which focuses on exams.
5 Knowledge of reflective practice and classroom enquiry is not well developed among student-teachers, mentors, and tutors etc.
6 Poorly resourced partner schools do not provide appropriate environment for practice

Course Title	**STS: Developing Teaching (2)**						
Course Code		**Course Level: 200**	**Credit value: 6**	**Semester 2**			
Pre-requisite	STS: Developing Teaching (1) Pedagogic studies in Year 1						
Course Delivery Modes	**Face-to-face**	**Practical Activity√**	**Work-Based Learning√**	**Seminars√**	**Independent Study√**	**e-learning opportunities**	**Practicum**
Course Description	STS: Developing Teaching (2) is a school-based component of the teacher education programme designed to give student-teachers the opportunity to continue to observe, teach small groups of upper primary children, motivate, support and manage the learning of upper primary children. Student-teachers will work collaboratively with their peers under the supervision of their mentors to identify, assess and analyze the needs of early learners/children in all subjects regardless of their diverse socio-cultural and linguistic background, gender and age. The course is mounted to enable student-teachers to understand better the key features of the school curriculum and issues of its continuity and progression from the upper primary. Also, student-teachers will develop skills in conducting small scale classroom enquiry focusing on four (4) children and tracking their learning and progress. The course will						

	further enable student-teachers to have a growing understanding of the requirements of the National Teaching Standards in terms of their professional practice, knowledge, values and attitudes, and in particular their professional role as teachers. In addition, the course will help to build and strengthen student-teachers' skills in keeping a professional teaching portfolio and student reflective journal. Assessment of the course will be by the contents in the professional teaching portfolio, small scale classroom enquiry and reports from tutors and mentors (NTS. 1f, 2b, 2d, & 3f). The course duration is: Six (6) weeks visit in **School 2** (one day per week in school for small group observation) • **Four (4) weeks in school, teaching small groups (e.g. 4 children) during College vacation**	
Course Learning Outcomes	**OUTCOMES** **Upon completion of the course, student-teachers will be able to**:	**INDICATORS**
	CLO 1. Demonstrate skills of observing, teaching (small group e.g. 4 upper primarychildren), motivating, supporting and managing the learning of upper primary children in all subjects under the guidance of their mentors (in School 2) (NTS, 2a & b).	• Plan observation outline for small group support and management. • Provide report on activities showing support, motivation and management of 4 upper primary children's learning • Show records of specific observations from wider school environment • Provide records on cooperative learning activities among peers during observations.
	CLO 2. Demonstrate knowledge and skills in Identifying, assessing and analyzing the needs of upper primary learners with the support of their mentors (NTS, 2d, & 2e)	• Develop criteria for assessment of upper primary learners' needs. • Show records of small group discussions between mentors & peers focused on upper primary learners' needs. • Compile list of upper primary learners' needs identified.

	CLO 3. Demonstrate knowledge and understanding of the key features of the basic school curriculum (BSC), focusing on issues of continuity and progression from the upper primary level (NTS, 2a & b)	• Show records of small group discussions between mentors & peers on key features of the basic school curriculum. • Compile list of key features of BSC that focus on continuity & progression within specialism. • Record key features of BSC in SRJ.
	CLO 4. Demonstrate knowledge and skills in conducting small scale classroom enquiry focused on 4 upper primary children's learning and progress (NTS, 3b)	• Develop criteria for identification and selection of 4 children • Plan classroom enquiry to be conducted with 4 identified children based on gender balance (if applicable) and consideration of students with diverse backgrounds noted • Schedule procedure to track children's learning and progress • Collect data for analysis on children's learning • Provide implications of the results on children's' learning and progress
	CLO 5. Demonstrate knowledge and understanding of the NTS requirements in terms of professional values, attitudes, practice and knowledge; and professional role as teachers (NTS, 1d, 1f, & 2a)	• Show records of reviewed NTS requirements and procedures • Provide records of student-teacher role modelling as a teacher for pupils during interactions. • Provide records of compilation of interactions in schools using appropriate ICT tools (including audio, braille, embossers)

	Units	Topics:	Sub-topics (if any):	Teaching and Learning Activities (strategies) to achieve learning outcomes:
Course Content	**1**	**Observation (small groups)**	Classroom teaching and learning	▪ Observe upper primary class teaching and learning, teacher-pupils/pupil-pupil interactions ▪ Observe and record good practices in whole class and small group teaching & learning interactions/events ▪ Observe peers carrying out collaboratively planned activity with pupils (group or an individual) and how feedback is given on the learning (NTS 3d, 3f)
			Wider school life activities	▪ Observe wider school life, e.g. staff meetings, assemblies and pupils' play/lunch time activities, teaching and non-teaching staff; record in SRJ ▪ Observe PTA, SMC or CPD meetings and record incidents in SRJ (NTS. 1e) (Use checklist of items to be observed and record; use field notes recording strategies) ▪ Write in student reflective journal (SRJ) ▪ Keep a professional teaching portfolio or e-portfolio
			Teach small group (4 upper primary children)	▪ Prepare TL resource /aids to assist 4 children with learning needs under mentor's guidance (NTS3j) ▪ Prepare lesson plan to support 4 children in their one-on-one intervention (NTS. 3a) ▪ Assess learning and progress of 4 children (NTS. 3n)

				▪ Produce and use varieties of TL-resources as appropriate to context to plan and teach small group (4 children) (NTS. 3j) ▪ Work on 4 children with one-on-one intervention guided by mentor (NTS.2e) ▪ Track the planning, teaching and learning of a topic or the development of an essential skill in the Core Subjects (English/Literacy, maths, science or other subjects to identify the learning and teaching approaches and progress in learning in specialism [NTS. 3a] ▪ Create a safe learning environment and manage behaviour and learning. (NTS. 3c, 3d)
	2	**Identification of learners' needs**	List different kinds of upper primary learners' needs	▪ Select 4 children for learners' needs identification ▪ Discuss in small groups (student-teacher & mentor) diverse needs of learners ▪ Compile a list of learning/educational needs of upper primary learners (Ref. SEN strand) (NTS. 2e)
	3	**Basic school curriculum**	Key features of the school curriculum within specialisms	▪ Engage student-teachers in Group discussions with their mentors ▪ Compile lists of key features of BSC showing evidence of continuity and progression within specialisms ▪ Identify issues of continuity and progression (scope and sequence) (NTS. 2b)

	4	**Small scale Classroom enquiry with 4 upper primary children**	List possible items to be observed and researched	▪ Select 4 children to be studied (consider gender balance) ▪ Identify 4 children's behaviours, cultural, linguistics, socio-economic and educational backgrounds (consider diversity & inclusivity) ▪ Identify gaps in learning e.g. subject area ▪ Design data collection instruments (e.g. exercises, checklist etc.) and administer. ▪ Collect data on 4 children (behaviour, learning style, progress of learning etc.) and using appropriate ICT tools. • Consult appropriate resources to guide observations and to Identify the learning and teaching approaches and progress in children learning Use the following to collect data: ▪ Small group discussions ▪ Peer observation ▪ pair work and share ▪ evaluation of observation (give feedback to peers) and feedback from mentor. ▪ Analyse data and write enquiry report on children (NTS. 3b)
	5	**NTS requirements**	Professional values, attitudes, practice and knowledge	After using ICT to record wider school activities: ▪ Use debates/role play/games to exhibit expected or positive behaviours, attitudes and values of a professional teacher. ▪ Mentor gives feedback on values, attitudes etc. exhibited (NTS. 1b, 1f)

	6	**Student Reflective Journal**	Template of a student reflective journal with key items/themes (pay attention to inclusivity/diversity & ICT)	▪ Analyze and share ideas on sampled student reflective journals with mentorwhich include elements of inclusion and diversity. ▪ Develop reflective skills and reflect systematically on concrete/specific events ▪ Record reflections continually in student reflective journal (NTS. 1a)
	7	**Develop professional teaching portfolio**	Template for a professional teaching portfolio	▪ Analyse contents in sampled professional teaching portfolios with mentor ▪ Use the outline to build a professional teaching portfolio guided by mentor ▪ Develop professional portfolio building skills systematically ▪ Compile collected artefacts into professional teaching portfolio (NTS. 2a)
	Note: All reports should consider braille and large font size prints (on request			
Course Assessment (Educative Assessment: of, for, and as Learning)	**Component 1: PROFESSIONAL TEACHING PORTFOLIO (NTS, 1a, e, & f)** **Summary of Assessment Method**: Well organised and structured, reflective, representative, selective and showing creativity and well presented. Contents should include the following: Lesson planning for 4 children, lesson evaluations, 4 children's marked exercises with comments, photographs from wider school life observation, List of key features of BSC, TL resources, Personal teaching philosophy statement, Notes from staff meetings, SMC/PTA/CPD meetings etc. **Weighting: 40** % This is assessment of learning and assessment as learning **Assesses Learning Outcomes:** Develop a professional teaching portfolio with evidence from observations and other achievements **[CLOs 1, 2 & 3].**			

	Component 2: Mentors/Lead mentors and Tutors evaluation of student-teacher behaviour (values & attitudes) in School (NTS, 1d, e, f & g) **Summary of Assessment Method:** Reports from mentors indicating student-teachers' punctuality, regularity, discipline, respect for authority, human relation skills (e.g. interaction with pupils & other teachers), participation in co-curricular activities, etc., Tutors and mentors' evaluation feedback on student-teachers. **Weighting: 30 %** This is assessment of learning and assessment for learning **Assesses Learning Outcomes:** Demonstrate an understanding of NTS and professionalism (professional values & attitudes) in school, including **CLOs, 1, 2 3 & 5.**
	Component 3: Small scale Classroom enquiry with 4 children**(NTS, 3b)** **Summary of Assessment Method:** Rubrics for assessment [Problem identification, Statement of problem/issue, Research questions, data collection instruments, analysis and discussion of findings, conclusion and recommendations etc.] **Weighting: 30 %** This is assessment for learning and assessment as learning **Assesses Learning Outcomes:** Conduct small scale classroom enquiry focused on 4 children's learning and progress **[CLO 4]**
Instructional resources	• Videos/audio visual/tactile analysis of mentoring and coaching • Videos/audio visual/tactile of Classroom teaching & learning • Samples of classroom observation checklists (braille and written) • Samples of professional teaching portfolios • Samples of reflective log/SRJ • Samples of good/bad lesson plans • Samples of Staff/SMC/PTA meeting notes • Tutor professional development handbook • Samples of feedback instruments • T-TEL materials from www.t-tel.org • TESSA materials from www.tessafrica.org • Teaching Practice Handbooks from Universities and Colleges of Education • Teaching practice handbook
Required Text (Core)	Cohen, L.; Manion, L. Morrison, K., & Wyse, D. (2010). *A Guide to Teaching Practice* (5th Ed.) New York: Routledge. McIntosh, P. (2010). *Action Research and Reflective Practice: Creative and visual methods to facilitate reflection and learning.* LondCohen, L.; Manion, L. Morrison, K., & Wyse, D. (2010). *A Guide to Teaching Practice* (5th Ed.) New York: Routledge. Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). *Pedagogy, curriculum, teaching*

	practices and teacher education in developing countries. Education rigorous literature review. Department for International Development on: Routledge.www.teachersnetwork.org/tnli/research
Additional Reading Resources	Conn, K. (2014). *Identifying Effective Education Interventions in Sub-Saharan Africa: A meta-analysis of rigorous impact evaluations* (Doctoral dissertation, Columbia University). Lane, K. L., Carter, E. W., Common, C., and Jordan, A. (2012), Teacher Expectations for Student Performance: Lessons Learned and Implications for Research and Practice. In Bryan G. Cook, Melody Tankersley, Timothy J. Landrum (Eds.) Classroom Behavior, Contexts, and Interventions (Advances in Learning and Behavioral Disabilities, Volume 25) Emerald Group Publishing Limited, pp. 95-129. Ormrod, J.E. (2014). *Educational psychology: Developing learners.*Pearson: Boston. The Sabre Charitable Trust, (2017). *Assessment manual*. Accra: Conker House Publishing Ltd. Vavrus, F., & Bartlett, L. (2013). Testing and teaching. In: F. Vavrus & L. Bartlett (Eds.), *Teaching in tension: International pedagogies, national policies, and teachers' practices in Tanzania (93-114).* Rotterdam: Sense.

Year Three Semester 1

Pedagogic Knowledge with ICT & Inclusion: SEN/Gender

CONTEXT

To foster learner-friendly environments in all Ghanaian primary schools, there is need for the provision of effective guidance and counselling sessions to avert situations and deal with behaviours that do not promote maximum teaching and learning in schools/homes. It is expected that knowledge gained from this course will equip student teachers with key skills to manage behaviour, learning and transition of primary school learners from Upper Primary to the Junior High School.

Course Title	**Guidance and Counselling for Upper Primary**						
Course Code		**Course Level: 300**		**Credit value: 3**		**Semester 1**	
Pre-requisite	Student teachers have been exposed to psychology of human development and learning, Inclusive school based enquiry						
Course Delivery Modes	**Face-to-face: [√]**	**Practical Activity [√]**	**Work-Based Learning: [√]**	**Seminars[√]**	**Independent Study: [√]**	**e-learning opportunities [√]**	**Practicum: [√]**
Course Description (indicate NTS, NTECF, BSC GLE to be addressed)	The course intends to provide sound knowledge and understanding of the principles and foundations of guidance and counselling in primary schools. It seeks to provide student teachers with the knowledge and understanding of concepts and practical issues in guidance and counselling, and how they contribute to the education of primary school children with diverse backgrounds and in diverse learning environments. It also seeks to expose student teachers to the services rendered by the school in the educational, vocational and personal guidance of learners at the middle childhood stage. The course further focuses on the tools, techniques and services of Guidance and Counselling, and the vital role of teachers in the provision of various guidance services to learners and parents in this era of rapid socio-economic change Differentiated interactive techniques (including pyramid and panel discussions, role play, peer counselling, audio-visual and tactile analysis, diamond nine, shower thoughts) and assessment procedures (child study reports, projects, case studies, assessment inventories and digital/manual portfolios, individual and group presentations) will be employed in the learning process to equip student teachers with the requisite techniques and strategies to provide guidance and counselling services to learners with diverse needs during supported teaching in schools **(NTECF p.68, NTS 2d, 3e, 3k, 3p, 3l, p.18)**.						

Course Learning Outcomes	On successful completion of the course, student teachers will be able to:	Indicators
	CLO 1. demonstrate a clear knowledge and understanding of the historical and conceptual issues in guidance and counselling **(NTECF p.4, 13, 18, NTS 3f).**	• Provide the important milestones in guidance and counselling in Ghana. • Discuss the differences and similarities between guidance and counselling.
	CLO 2. demonstrate knowledge, understanding and use of guidance services, communication skills and counselling techniques, including online resources for counselling **(NTECF p.68; NTS,3c,3d)**.	• Explain each of the guidance services. • Enumerate the communicative skills required of a good counsellor of primary school learners. • Discuss some counselling techniques used by counsellors including online resources for counselling primary school learners.
	CLO 3. demonstrate knowledge and understanding of diverse counselling techniques suitable for learners with diverse physical, mental, social, behavioural, emotional needs in primary schools**(NTS 3g)**	Identify the counselling techniques and services used to manage different needs and challenges of middle childhood learner in the; • Psychomotor domain. • Cognitive domain. • Affective domain.
	CLO 4. demonstrate knowledge and understanding of ethical standards and legal concerns in counselling learners in their middle childhood stage**(NTS 1d)**	• Discuss the ethical procedures in counselling learners in middle childhood • Explain the legal implications and concerns in counselling in learners in middle childhood. • Discuss the differences and similarities between ethical and legal issues in counselling learners in middle childhood .
	CLO 5. develop and demonstrate passion and commitment in applying appropriate techniques and assessment inventories in counselling for behaviour modification of learners including those with special needs in primary schools (**NTECF p. 13, NTECF p.68, NTS 2f, NTS 1f, NTS 1b, 1g).**	• Outline the criteria used to select specific techniques for specific counselling situations for diverse pupils. • Explain the techniques appropriate for specific counselling needs primary school pupils. • Apply appropriate counselling skills and techniques in modifying behaviour and supporting the learning of learners with diverse needs in primary schools.

	Units	Topics:	Sub-topics (if any):	Teaching and learning activities to achieve learning outcomes:
	1	1. Historical and conceptual issues	• Development of guidance and counselling • Meaning of guidance and counselling • Differences and similarities between guidance and counselling • Misconceptions and barriers to counselling in inclusive basic schools • Purpose, objectives and the need for guidance and counselling in schools • Principles of guidance and counselling • Types of counselling • Role of teachers and parents in guidance and counselling in schools	Use Talk for learning approaches to discuss the history and meaning of guidance and counselling in Ghana; Shower thoughts on the misconceptions and barriers to counselling in inclusive basic schools; Discussion on the principles of guidance and counselling; Audio-visual and tactile analysis of types of counselling; Simulation of the roles of teachers and parents in guidance and counselling.
	2	2. Guidance services	• Orientation service • Placement service • Appraisal service • Vocational and career service • Information service • Consultation service • Counselling service • Referral service • Follow-up service • Evaluation service	Pyramid and panel discussions on some guidance services; think-pair-share; audio-visual and tactile analysis of some of the guidance services; role play of procedures involved in the delivery of some of the guidance services; individual and group presentations using power point

	3	3. Communication skills in counselling	• The communication process • Listening and giving feedback • Developing listening skills • Developing responding (continuation responses and questioning) • Developing skills in feedback (paraphrasing, reflection of feelings and confrontation) • Developing skills in feedback (focussing and summarising)	Generate posters to model the communication process(verbal and non-verbal); Dramatisation of some of the communication skills in counselling such as listening and giving feedback; Audio-visual and tactile analysis of some of the communication skills in counselling; Peer counselling to highlight various aspects of communication skills in counselling; Case studies of counselling sessions. Reflective notes on the communication skills in counselling
	4	4. Counselling techniques for behaviour modification in children	• Conditions that facilitate counselling • Stages in the counselling process • Techniques of counselling (cognitive restructuring and assertive training; modelling; systematic desensitisation and relaxation) • Techniques for online counselling	Sociometric techniques, Case studies of counselling sessions to modelling the conditions, stages and techniques of counselling; Audio-visual and tactile analysis of some counselling techniques for behaviour modification in children Individual and group presentations and projects on techniques for online counselling
	5	5. Counselling learners with special needs	Idiographic assessment; unique counsellor characteristics; parent counselling and guidance services for learners with SEN; confidentiality/ ethical issues in counselling learners with SEN; creating a counselling learners with SEN environment; key counselling approaches for learners with SEN	Resource persons, Individual and group projects using ICT, role play, individual and group presentations using power point, case studies, sociometric techniques, audio-visual and tactile analysis
	6	6. Ethical standards and legal concerns in counselling	• Areas of ethical and legal concern • Ethical standards in counselling • Confidentiality and privacy • Privileged information • Legal issues in counselling	Audio-visual and tactile analysis of selected cases on ethical concerns in counselling sessions; Audio-visual and tactile analysis of selected cases on legal concerns in counselling; Case

			• Professionalism	studies of cases bothering on ethical and legal concerns; Pyramid and panel discussion on professionalism in counselling; Individual and group presentations of ethical standards and legal concerns in counselling; Reflective notes
	7	7. Assessment inventories for counselling and practicum.	• Meaning and Types of assessment inventories for counselling and practicum • Factors to consider to develop an assessment inventory • Factors/Criteria to consider in selecting assessment inventories for specific counselling situations • Uses of assessment inventories for counselling and practicum	Pyramid and panel discussions on some assessment inventories used by counsellors; Individual and group presentations on the types and uses of specific assessment inventories; Audio-visual and tactile analysis of uses of assessment inventories for counselling and practicum; Case studies of specific counselling situations; group project on application of techniques in supporting individual pupils
Reading resources	1.Laptops, TV, Radio, Smartphones, Tablets 2.T-Tel modules, 3.TESSA Open Educational Resources (including YouTube, MOOCS,-Udemy/Coursera, khan Academy, TESSA) 4.The iBox (CENDLOS), 5.Productivity tools, 6. Instructional laboratories (with multimedia equipment and smart boards)			
Course Assessment	**Component 1**: formative assessment (individual and group presentation) Summary of Assessment Method: Individual presentation on history and development of guidance and counselling in Ghana; differences and similarities between guidance and counselling; the importance of guidance services and their implications and communication and counselling techniques of a good counsellor of Upper Primary learners. (core skills to be developed: communication and collaboration, critical thinking, value for diversity and inclusion, personal development, digital literacy) Weighting: 30% • Assesses Learning Outcomes: CLO 1, CLO 2			
	Component 2: Formative assessment (project on school related problems) Summary of Assessment Method: Case study and presentation of report on some techniques and approaches adopted for different counselling needs of an early childhood learner. Report should be part of portfolios; reflective notes on some counselling sessions and its ethical and legal implications for counselling an Upper Primary learner. (core skills to be developed: communication and collaboration, critical thinking, value for diversity and inclusion, personal development, digital literacy) Weighting: 30%			

	Assesses Learning Outcomes: CLO 3, CLO 4
	Component 3: Summative assessment (End of semester Examinations) Summary of Assessment Method: End of semester examination on historical and conceptual issues; Guidance services; Communication skills in counselling; Counselling techniques for behaviour modification in children; Counselling learners with special needs; Ethical standards and legal concerns in counselling. (core skills to be developed: critical thinking, personal development) Weighting: 40% Assesses Learning Outcomes: CLO 1, 2, 3, 4, 5.
Required Text (Core)	Ackummey, M. A., & Ackom, P. E. (2010). *Counselling in teacher education*. Winneba: Institute for Educational Development and Extension. Antwi, T. (2016). *Introduction to guidance and counselling for the basic school educator*. Accra: Design's Network. Gibson, R. L., & Mitchell, M. (2008). *Introduction to counselling and guidance* (7th ed.). New York: Pearson Education, Inc. Kankam, G., & Onivehu, A. (2000). *Principles and practice of guidance and counselling*. Accra: K. "N" A. B. Ltd. Pietrofesa, J. (1984).*Counselling an introduction*. New York: Houghton Mifflin College Division. Pietrofesa, J., Leonard, G.E., Van Hoose, W.H. (1971).*The authentic counsellor*. Chicago Rand McNally: USA. Taylor, A. I., & Buku, D. K. (2006). *Basis in guidance and counselling* (2nd ed.). Accra: Salt and Light.
Additional Reading List	Ackummey, M. A. (2003). *Organization and administration of school guidance programme*. Accra: Media Graphic & Press Ltd. Akindde, E. A. (2012). *Introduction to modern guidance and counselling: A basic text for tertiary institutions*. Ibadan: Brightways Publishers. Bedu-Addo, P. K. A. (2014). *Guidance and counselling "unmasked"*. Kumasi: Approacher's Ghana Limited. Buku, D. K., Noi-Okwei, C., & Wilson, K. N. (2012). *Counselling skills and strategies*. Accra: SEDCO Publishing Ltd. Miller, D. F. (2010). *Positive child guidance* (6th ed.). Belmont, California: Wadsworth, Cengage Learning. Namale, M. K. (2012). *Guidance and counselling in education*. Tema: Richblank Publications. Oladele, J. O. (2000). *Guidance and counselling. A functional approach*. Lagos: John-Lad Publisher Ltd. Shertzer, B., & Stone, S. C. (1980). *Fundamentals of counselling* (3rd ed.). Hughton: Mifflin Company.

Language and Literacy[7]

CONTEXT

Literature plays a key role in language learning but it is de-emphasised in the educational system. Most language teachers think literature is for the higher levels. At the Upper Primary (P4-6) level attention is paid to teaching the basics of reading to teaching grammar to the detriment of literature. There is the misconception that literature is difficult and belongs to learners at the advanced level in education (JHS and SHS). Literature develops in learners in the Upper Primary's love and passion for life-long reading, develop cognitive skills and nurtures growth and development of children's personality and social skills but these values are lost because we do not teach our learners literature at the Upper Primary level. This is so because teachers are not trained to teach literature at the Upper Primary level. In addition, there are not enough literature materials in schools. In a nutshell, literature is neglected in Upper Primary. There is therefore the need to train teachers who can develop literature materials for children and teach it effectively in the Upper Primary classroom to inculcate in learners life-long reading.

Course Title	**Literacy: Children's Literature**						
Course Code		**Course Level: 300**	**Credit value: 3**			**Semester 1**	
Pre-requisite	Teaching Reading and Writing						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activities** ☒	**Work-Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**E-Learning Opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	This course aims to introduce student teachers to children's literature and how to promote it in the Upper Primary classroom. The course equips student teachers with the requisite knowledge, understanding and skill to teach children's literature at the Upper Primary level and ways to whip up children's interest and love in literature. It covers key areas in children's literature like the definition, nature of literature and characteristics of children's literature. It also addresses misconceptions about literature and exposes student teachers to the value and scope of children's literature, and how to engage parents in the development of their children's interest in literature at the Upper Primary level. The course also looks at issues in teaching and learning children literature, assessing children's literature, and preparing appropriate materials to address the diverse needs and interests of Upper Primary in learning literature. Trainee teacher will be exposed to the use of technology in lesson to help student teachers apply it in their materials production and teaching. The course also equips student teachers with the skill to develop						

[7] For Language & Literacy at this level, students will take both the English Language and Ghanaian Language course for 3 credits. Lessons for the semester will be split between the two language courses

	supplementary literature/reading materials (both fiction and non-fiction) for learners and also provides opportunities for school visits for student teachers to observe and interact with teachers on how they teach literature at the Upper Primary classroom and do co-teaching with mentor or colleague. This will assist them to develop their portfolio for the course. The delivery mode includes discussion, problem solving, questions, presentation brainstorming, group/individual work, self-study, school visits/observation and think-pair-share, methods that take all manner of learners into consideration. The mode of assessing student teachers includes quizzes, examinations, report writing, assignments, presentations, practical work, group work, individual work, and class participation. The course seeks to fulfil the following NTS and NTECF requirements: NTS 1a, c, 2 b, d, and 3a, e, h, j, k, NTECF5, 6, 8, 10 (p. 25).	
Course Learning Outcomes with indicators	**Learning Outcomes** On successful completion of the course, student teachers will be able to:	**Indicators**
	1. Demonstrate knowledge and understanding of the definition, characteristics, scope and values of children's literature and misconceptions of literature. (NTS 2b, c)	• Define children's literature, its characteristic and scope. • Identify and appreciate the values of children's literatures • Identify misconceptions of teaching literature at the Upper Primary level and address them.
	2. Exhibit knowledge, understanding and skills of teaching Upper Primary children's literature and the role teachers and parents can play in developing Upper Primary learners' interest in literature (NTS 1a, e)	• Indicate the role teachers can play in the development of learners' literature at the Upper Primary level • Discuss the role parents can play in the development of their children's love and appreciation for literature
	4. Demonstrate knowledge of differentiated ways of assessing diverse learners' literature skills at the Upper Primary level. (NTS 3k, NTECF bullet 6, p. 25)	• Identify ways of assessing Upper Primary learner's literature skills development • Discuss the challenges of assessing the development of Upper Primary learners' literature skills at the Upper Primary level and how to address the challenges.
	5. Prepare appropriate teaching-learning materials using technology and other means to teach and enhance Upper Primary learners' love and appreciation for literature (NTS j, NTEF bullet10, p. 25)	• Prepare appropriate materials that address the diverse needs and interests of Upper Primary learners to enhance their love and appreciation for literature • Use appropriate children's literature learning materials to improve all learners' understanding of literature at the Upper Primary level.

	6. Develop Upper Primary level supplementary reading materials to enhance the teaching and learning of literature at the Upper Primary level and test the readability of existing materials. (NTS 3j) (NTECF, 8, 10 p.25)		• Prepare appropriate supplementary literature materials for Upper Primary learners that are underpinned by gender, inclusive, interest, ethnic and linguistics issues. • Review supplementary literature/reading materials and select appropriate ones to benefit the diverse needs of learners. • Do action research on the readability of existing literature materials at the Upper primary level	
	7. Plan and co-teach literature lesson at the Upper primary level that caters for the diverse needs and interests of learners (NTS 3a, e, h, i, l, m, NTECF bullet 5 ,p.25)		• Plan an appropriate Upper Primary literature lesson bearing in mind the age, specific needs and interest of learners. • Co-teach a literature lesson using the lesson plan designed to reach all manner of learners to address their literature needs and interests.	
COURSE CONTENT	**UNITS**	**TOPICS**	**SUB-TOPICS**	**Suggested Teaching and learning activities to achieve learning outcomes**
	1	Introduction to Children's Literature	1.1 Children's Literature 1.1.1. Definition 1.1.2. Characteristics of children's Literature 1.1.3 Scope of children's literature 1.1.4 Values of Children's literature 1. 2. Misconceptions about literature	1. **Discussion** (student teachers discuss in groups the nature, characteristics, and scope of children's literature and present their findings orally to class) 2. Think-pair-share (Student teachers work individually on the values of children's literature in literacy development, share with partners and later present to class orally) 3. Problem solving (student teachers are put in groups and asked to brainstorm on the misconception people and themselves have about literature and how to address such misconceptions and do class presentation on their findings)

	2	**Teaching Upper Primary literature**	2.1. Teaching children's literature 2.1. 1 Role of teacher in teaching children's literature 2.1.2 Role of parents in developing children's love for literature	1. **Discussion** (students are put in groups to discuss the role teachers can play in teaching children's literature to develop the literacy skills of learners and present their findings to class for further discussions) **2. Problem solving** (students are shown videos of parents helping their children in to develop literature skills. Student teachers then break into groups to discuss the video and identify specific roles parents can play to help their children develop love and appreciation for literature. Student teachers discuss their findings with class)
	3	**Issues in teaching Children's literature**	3.1Challenges of developing children's literature 3.2. Ways to address challenges of children's literature	1.**Seminar/presentation** (students are tasked in groups to research on the various challenges of developing children's love for literature and present to class for discussion) **2. Discussions** (teacher leads students teachers through leading and probing questions to find ways of addressing the challenges of developing literature among learners) 3. **Debate** (In groups, students teachers debate the pros and cons of children's literature in literacy development)

	4	**Assessing children's literature skills**	4.1. Tools for assessing children's literature skills 4.1.1 Use of checklist 4.1.2 EGRA 4.1.3 Questionnaire/ oral interview 4.2 Challenges of assessing children's literature skills 4.3 Addressing challenges of assessing children's literature skills	1.Lecture/Discussion (teachers introduces the topic and breaks students into groups with each group assign an assessment tool to research on how it is used in assessing children's literature development skills, challenges faced in using the assessment tool and how to address the challenges and present to class) 2. School observation and enquiry (students teachers visit schools to find out how the discussed assessment tools are used by teachers, the challenges they face using such assessments and how they address the challenges).
	5	**Upper Primary Children's literature materials**	5.1.Preparing Upper Primary children's materials for literature 5.2 Factors to consider in preparing or selecting children's literature books 5.3 Challenges of preparing upper primary children's literature materials.	1. **Discussion/brainstorming** (teacher introduces the topic and leads discussion on preparing Upper Primary learners' literature materials using thought-provoking questions and providing constructive feedback). **2. Think-pair-share** (student teachers work individually to find out the factors to be considered when preparing or selecting children's literature books). **3. Concept mapping** (students teachers are put into groups to make a concept map of the challenges to developing children's literature materials and how to address the challenges and later present to class)

				4. School observation (students visit partners schools to acquaint themselves with Upper Primary learners' literature materials available))
	6	**Developing supplementary children's literature materials**	6. 1. Characteristics of Upper Primary reading books 6. 2 Common themes in Upper Primary reading books 6.3 Gender and cultural sensitivity in children's reading books 6.4 Inclusivity in children's books	1. **Teacher Presentation** (Teacher presents to students the characteristics of Upper Primary reading books, common themes in used in the books, genres used and reasons for developing supplementary reading materials. This is followed by class discussion) 2. **Group research and presentation** (student teachers make research from books and online to identify the need for inclusivity and equity in Upper Primary books, gender and cultural sensitivity. Student teachers present their findings to class for discussion). **3. School visit** (Student teachers visit schools to review existing Upper Primary supplementary readers and their fit in terms of gender and cultural sensitivity and inclusivity for literature lessons and write a report on it) 4. **Action Research** (student teachers do a readability test on Upper Primary literature books available and write report on it.
	7	7. Teaching Upper Primary literature	7.1 Preparing lesson plan for teaching literature to Upper Primary learners 7.2 Teaching Upper Primary learners' literature using lesson plan designed.	1. **Individual Work** (student teachers prepare individual lesson plans to teach literature to learners using appropriate Upper Primary literature book.

				2. **Peer Review** (Student teachers critique lesson presented and offer constructive suggestions for improvement)
Course Assessment (Educative assessment of, for, and as learning)	Component 1: Summary of Assessment Method: Assessment of learning (2 short quizzes for diagnostic purposes and an end of semester examination) on what is children's literature, characteristic and scope, importance of children's literature in literacy development, role of parents and teachers in children's literature development, and assessing children literature skills development. (cores skills targeted are communication, inclusivity (gender and cultural) collaboration, team work, creativity, and digital literacy) Weighting: 40% Assesses Learning Outcomes: (Course Learning outcomes measured 1-4)			
	Component 2: Summary of Assessment Method: Assessment for and as learning (2 Group presentation , 1 Individual presentation and class participation*(core skills targeted are communication, enquiry skills, collaboration, team work, creativity, and digital literacy)* Weighting: 30 % Assesses Learning Outcomes: (Course learning outcomes measured 4. 5. 6, 7, and 8)			
	Component 3: Summary of Assessment Method: Observation and report writing on school visits (2)*(core skills targeted are communication, collaboration, team work, enquiry skills, creativity, and digital literacy)* Weighting: 30% Assesses Learning Outcomes: Course learning outcomes measured 5, 6, 7 and 8			
Instruction Resources	• CLCD (Children's Literature Comprehensive Database) • Teaching Reading with Literature • http://www.ala.org/ala/mgrps/divs/yalsa/booklistsawards/greatgraphicnovelsforteens/ggnt11_topten.cfm • http://www.storylineonline.net/ • Computer • Language lab • Reading videos • Stories from Africa - www.zapmeta.ws • African Fables & Folktales - http://africa.mrdonn.org/fables			
Required text	Leland, C. (2012). *Teaching children's literature: It's critical*. London,UK:Routledge			
Reading List	Duncan, D (2009). *Teaching Children's Literature: Making Stories Work in the Classroom*. London, UK: Routledge McClure , A. A., Garthwait , A. V. &Kristo, K. V. (2014).*Teaching Children's Literature in an Era of Standards 1st Edition,* London,UK: Pearson			

CONTEXT

There is the need for teachers to be sufficiently prepared for the teaching of English as a second language (General contextual issue 8). Such preparation include being familiar with the English language curriculum for pre-tertiary education. The principles that underline the organization of the KG, Primary and Junior High School curricula in terms of continuity, sequence, integration and articulation that give in-depth knowledge of the organized content have not been given a priority during teaching and learning. This course is, therefore, designed to train student teachers to acquire knowledge and skills in English language curriculum at the Upper Primary School levels to enable them to appreciate principles of the organization of the content and the appropriate use of assessment tools.

Course Title	**English Language Curriculum for Upper Primary**							
Course Code		**Course Level:**	300	**Credit value:**	**3**		**Semester** 1	
Pre-requisite								
Course Delivery Modes	**Face-to-face** ✓	**Practical Activity** ✓		**Independent Study** ✓	**Seminar**	**e-learning opportunities**	**Work-based learning**	**Practicum**
Course Description	This course is in three parts: curricula for Kindergarten, Primary and Junior High School. The course aims at helping student teachers get an in-depth knowledge of the foundation of the English language curriculum. **The first part** of the course begins with the common elements of the three levels. This includes the definitional issues, history of curriculum development, models and differences between curriculum and syllabus. The course also presents the common characteristics of the English language curriculum and the suggestions for teaching it. In this first part of the course, the student teachers will focus on demonstrating comprehensive knowledge of the official school curriculum including learning outcomes **The second part** of the course prepares							

	student teachers to effectively explore the curriculum of each level of the Kindergarten, Primary and Junior High School. The content emphasizes listening and speaking, grammar, reading, writing, children's literature and extensive reading regarding each level. Student teachers are to demonstrate their familiarity with the content at each level. **The third part** of the course also looks at the general organizing principles of continuity, sequence, integration and articulation and how they are applied to the organisation of the content of each level of the curricula. The student teachers focus on the principle of maxims of teaching in terms of the organization of the content from the known to the unknown, from the simple to the complex, etc. and relate them to the organising principles of continuity, sequence, integration and articulation. This will ultimately make them effectively implement the curriculum at the various levels. The course culminates with the use of the appropriate assessment tools in the assessment of learners. In this regard, a variety of assessment modes to support learning will be used and this intends to equip student teachers with knowledge and skills to construct effective assessment in the English Language Discussions, group work, presentations and brainstorming will be the delivery approaches for the course. The course will be assessed through assignments, group work and case studies **(NTS 2b: 13; 3k: 14; NTECF: 25).**	
	Learning outcome Student teachers should be able to:	**Indicators**
Course Learning Outcomes	1. Demonstrate their understanding of curriculum theory, its foundation and models (**NTS 2b: 13)**	• Explain the concept curriculum • Discuss the theory that underpins curriculum development. • Explore the models of curriculum development.
	2. Demonstrate knowledge of the characteristics of the English language curriculum from KG to JHS (**NTS 2d: 13)**	• Describe the characteristics of the Upper Primary curriculum. • Discuss the importance of the characteristics of the curriculum.
	3. Demonstrate an in-depth knowledge of the Upper Primary English language curriculum **(NTS 2b; 2d: 13)**	• Discuss the content of the B4 – B6 English language curriculum. • Identify and explain the content of the Upper Primary curriculum.
	4. Organize the content into teachable units for a scheme of work **(NTS 3a: 14**)and work in collaboration with other professionals to write individualised plans of action, including differentiated instruction/assessment	• Design a scheme of work • Use the scheme of work to plan a teaching lesson or plan and write individualized plans of action.

	5. Demonstrate knowledge of the organizing principles of the content of the English language curriculum **(NTS 2b; 2d: 13)**			• Identify the organizing principles of continuity, sequence, integration and articulation. • Use the organizing principles to arrange topics in a scheme, e.g. from simple to complex.
	6. Be familiar with the appropriate assessment tools applicable to the teaching and learning of the English language (**NTS 3k; 3o: 14**)			• Identify and explain the appropriate tools for assessment in the English language course.
	Units	**Topics:**	**Sub-topics**	**Teaching and learning activities to achieve learning outcomes**
	1	The concept and theory of curriculum development	• Definitional issues • Brief history of curriculum development • Models of curriculum development • The three stages of curriculum – development, implementation and evaluation • Curriculum and syllabus • The English language curriculum	• **Discussion**: Discuss with student teachers definitions and development of curriculum as a field of study. • **Group discussion**: In a group discussion, explore at least three models of curriculum development. • **Group presentation**: Task student teachers to research through library and online to come out with the differences between curriculum and syllabus. • **Discussion**: Discuss with student teachers the concept of the English language curriculum
	2	Characteristics of the English Language curriculum	• Context • General aims • General outcomes • Specific outcomes • Scope of content • Pre-requisite skills • Organization of the curriculum • Time allocation • Suggesting for teaching the English curriculum	• **Discussion**: Discuss with student teachers the context for the design of the B4-B6 English language curricula. • **Brainstorming**: In purposeful groups, student teachers brainstorm to come out with the aims, goals and objectives of the curriculum. • **Discussion**: Discuss the suggestions for teaching the school curriculum as enshrined in the B4-B6 English language curricula. • **Presentation**: Using a printed out of the B4-B6 curricula or through online, student teachers prepare and make

			• Profile dimension • Form of assessment	presentation on time allocation, profile dimension, pre-requisite skills and form of assessment.
	3	Content Of The Upper Primary (4-6) English Language Curriculum	Aspects /content of the Upper Primary (4-6) English Language curriculum • Speech work • Listening and speaking • Grammar • Reading • Extensive reading • Children's literature • Library	• **Demonstration**: Demonstrate how a particular sound is produced and model it for the learners. • **Discussion**: Discuss the organizing principles of the content of the curriculum in general. • **Discussion**: Discuss continuity, sequence, integration and articulation of grammar, reading, literature listening and speaking as enshrined in the curriculum
	4	Designing the English Language scheme of work	• Scheme of work • Week • Week ending • Topic • Reference • TLM • Lesson plan	• **Discussion**: Discuss the components of a scheme of work. • **Group work**: Each group designs and presents a scheme of work for two weeks covering the various sections. • **Discussion**: Discuss the issues arising from the presentation. • **Discussion**: Student teachers compare their scheme of work prepared in colleges with their mentors and write their observation in their reflective journals.
	5	Interpreting and implementing Upper Primary English Language curricula	• Organising principles ▪ Continuity ▪ Sequence ▪ Integration ▪ Articulation • Implementation	• **Independent search and discussion**: Task students to search for information on the internet about the organizing principle of the English language curriculum. • **Discussion**: Using a printed out of the Upper Primary curriculum or through online, discuss how the curricula have been organized taking into consideration the elements of continuity, sequence, integration and articulation. • **Discussion**: Discuss the suggestions for implementing the Upper Primary curricula. • Student teachers observe lessons on a given strand, e.g.

				grammar, and try to find out how the organizing principles are integrated in the lesson delivery and finally write their reflections in their reflective journals.
	6	Assessment of Upper Primary English language curricula	• Assessment tools in the various English language curricula • Effective use of assessment tools. • Importance of the assessment tools	• **Discussion**: Identify and discuss the assessment tools of the Upper Primary English language curricula. • **Group presentation**: Task student teachers to make presentation on the differences among the assessment tools of the Upper Primary curriculum. • **Discussion**: Discuss the importance and effective use of the assessment tools in assessing learners. • Student teachers observe the forms of assessment a mentor uses in the classroom and identify how he/she is able to implement the assessment of, for and as learning; student teachers discuss the observation and write them in their reflective journals.
	COMPONENT 1 Assessment of learning (summative assessment) A written examination to assess student teachers' subject and pedagogic knowledge in the theory of the English language curriculum development, implementation and evaluation/assessment Assess learning outcomes (CLO 1, 5, 6) Weighting: [30%] Core Skills: Knowledge, communication, critical thinking **COMPONENT 2: COURSEWORK :** Assessment for and as learning (formative) Summary of Assessment Method: 2 Group presentations, 1individual presentations (CLO 4, 5) Weighting: 30 % Core skills: organizing principles of continuity, sequence, integration and articulation **COMPONENT 3** Individual assignment – Student teachers to write on the characteristics of the English language curriculum, assessment procedures, design of scheme of work and organizing principles Assess learning outcomes (CLO 2, 4, 5, 6) Weighting: 40% Core skills: critical thinking, creativity, digital literacy			

Required Text (Core)	NACCA/Ministry of Education (MoE) (2012; 2018). *Teaching syllabus for primary school*. Accra: Ministry of Education.
Additional Reading List	Alex, M. (2003). *Teaching and Learning: Pedagogy, curriculum and culture*. Routledge Falmer. Glatthorn, A. A., Boschee, F. & Whitehead, M. B. (2006). *Curriculum leadership: Development and implementation*. London: Sage Publications. Lewy, A. (1991). *The international encyclopaedia of curriculum*. New York: Pergamon Press. Marsh, C. J. (1992). *Key concepts for understanding curriculum*. London: The Falmer Press. Mash, C. J. & Willis, G. (2007). *Curriculum: Alternative approaches, ongoing issues*. New Jersey: Pearson. NACCA/Ministry of Education (MoE) (2012; 2018). *Teaching syllabus for Junior High School*. Accra. NACCA/Ministry of Education (MoE) (2012; 2018). *Teaching syllabus for Kindergarten*. Accra. Ornstein, A. C., & Behar-Horenstein, L. S. (2003). *Contemporary issues in curriculum*. Pearson Education, Inc.

Language and Literacy[8]

CONTEXT

The development of reading in Ghana is of great concern to educators because it holds the key to unlocking content in other academic disciplines. Writing also enhances effective communication in academic discipline. The development of reading and writing at the Upper Primary level present a problem to many teachers because they have not been adequately prepared for the task. Besides, there are also inadequate materials and resources to be used to teach reading and writing at the Upper Primary level. Additionally, there is the misconception that developing children's reading and writing skills is the sole responsibility of languages teachers so they care less about reading and writing development among their learners. Besides, Upper Primary (P4-6) teachers have also not been adequately trained to transition learners from Primary 3 to Primary4 and from Primary 6 to JHS 1 in terms of teaching reading and writing. In addition, integrating ICT into the training of ITE in teaching reading and writing is de-emphasised. Reading and writing has had little attention paid to them in the training of teachers and has therefore resulted in their ineffective implementation in schools which has resulted in low performance in reading and writing among learners. Children's inability to read is a global concern which needs special attention. The same can also be said about writing. In addition to the above, training teachers to integrate reading and writing has been de-emphasized over the years. The implication of these is that teachers should be adequately trained to improve reading and writing skills of Upper Primary learners.

Course Title	**Literacy: Teaching Reading and Writing for Upper Primary**						
Course Code		**Course Level: Level 300**		**Credit value: 3**		**Semester 1**	
Pre-requisite	Teaching speaking and listening						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activities** ☒	**Work-Based Learning** ☐	**Seminars** ☒	**Independent Study** ☒	**E-Learning Opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF to be addressed)	This course introduces student teachers to the skills of teaching reading and writing at the Upper Primary level. The course furnishes student teachers with the essential knowledge and understanding of the concept, stages, and benefits of reading and writing and introduces them to the various strategies for effective teaching of reading and writing at the Upper Primary level. The course also equips student teachers with the essential skills that will enable them prepare effective reading and writing materials that match the needs and interests of all learners. Student teachers will also be exposed to teaching reading and writing using the L2 with L1 support to transition from P3 to P4. It equips student teachers with skills and abilities to inculcate in learners, the culture of reading and writing for pleasure and for information. Again the course will equip student teachers with the skill to identify learners with reading and writing needs and						

[8] For Language & Literacy at this level, students will take both the English Language and Ghanaian Language course for 3 credits. Lessons for the semester will be split between the two language courses

	apply specific skills in addressing such needs. The course makes provision for student teachers to observe and acquaint themselves with practical challenges that face both Upper Primary teachers and their learners during the process of developing basic reading and writing competencies and guides them to find and develop remedies for their resolution through regular partner school visits. Additionally, the course will provide student teachers the opportunity to practice teaching reading and writing in the Upper Primary classroom. The course will be delivered through student-centred approaches such as discussion, project work/seminars, class presentation, observation/school visits, role-play, practical teaching, checklist, think-pair-share, demonstrations, and child study. The assessment strategies for, of, and as learning will include quizzes/assignments, examinations, presentations, report writing, observations, co-teaching and portfolios. The course seeks to fulfil the following NTS and NTECF requirements: 1b, 2b, c, d, 3e, f, g, i, j, k, m and NTECF bullets 5, 6, 9, 13 (p. 25).	
Course Learning Outcomes	On successful completion of the course, Trainee teachers will be able to:	
	Learning Outcomes	**Indicators**
	1. Demonstrate knowledge and understanding of the concepts and benefits of reading and writing and their roles in the development of literacy in Upper Primary learners and misconceptions about reading and writing (NTS 1b, 3i)	• Explain the concept of reading and writing and the simple views of reading and writing • Discuss the importance of reading and writing in literacy development of Upper Primaryrs. • Examine the misconceptions about the role of reading and writing in literacy development and learning in general.
	2. Demonstrate knowledge and understanding of the theories of reading and models of teaching reading and writing and their implications for teaching reading and writing at the Upper Primary level (NTS 2b, d)	• Examine the theories and models of reading and writing • Discuss the implications of the theories and models of reading and writing on their Upper Primary classroom teaching.
	3. Demonstrate understanding of the components and stages Upper Primary reading and writing development and apply them effectively to enhance the reading skills of diverse learners at the Upper Primary level (NTS 2c, 3e, j)	• Identify the components of reading • Identify the various stages of reading and writing development among Upper Primary learners. • Apply the knowledge of the stages to the teaching of reading and writing of small groups and takes responsibility for facilitating the learning of diverse needs and interests of learners in the Upper primary classroom.
	4. Use appropriate and differentiated reading and writing strategies to develop the reading and writing skills of diverseUpper Primary learners (NTS 3f; NTECF bullet 6; p. 25)	• Identify and explain the various strategies for developing reading and writing skills of Upper Primary learners • Apply the teaching strategies to develop the reading and writing skills of diverse needs and interests of Upper Primary learners • Use L1 to help learners transition smoothly from P3 to P4 in terms of reading and writing.

	5. Demonstrate knowledge and understanding of reading and writing problems of Upper Primary learners and examine ways these problems can be addressed to cater for the diverse learners in the Upper Primary classroom (NTS 3g; NTECF bullet 6; p. 25)	• Identify the problems of Upper Primary learners in reading and writing • Examine the various ways of addressing the reading and writing problems of Upper Primary learners.
	6. Demonstrate knowledge and skill in using appropriate technology tools to prepare reading and writing materials at the Upper Primary level and use them to teach reading and writing to benefit all manner of learners. (NTS 3g) (NTECF bullet 13; p. 25)	• Use appropriate technological tools to prepare reading and writing material to teach diverse Upper Primary learners reading and writing • Search online for information and practical ways of teaching Upper Primary learners with diverse needs and interests reading and writing • 6.3 Identify factors to consider when designing reading and writing materials to benefit the diverse learners in the classroom.
	7. Examine differentiated and appropriate assessment techniques to diagnose the reading and writing problems of diverse learners and use best remedial strategies to enhance their reading and writing development (NTS 3f, k, m and NTECF bullet 6; p. 25)	• Identify differentiated assessment strategies used in assessing the reading skills of diverse needs and interests of learners • Apply the various assessment techniques to assess the reading and writing skills of their learners
	8. Examine the key features of the reading and writing components of the Upper Primary literacy curriculum, identify how they are related and how it addresses or does not address the diverse ages, needs and interests of learners (NTECF bullets 5, 9, 13 –p.25)	• Interpret the various aspects of reading and writing components in the Upper Primary curriculum and identify whether it addresses or does not address the diverse needs and interests of learners. • Prepare a scheme of work to teach reading and writing from the curriculum to Upper Primary learners. • Evaluate the reading and writing curriculum to identify the deficiencies in it and how to address them.
	9. Plan and co-teach an integrated reading and writing lessons to all manner of learners at the Upper Primary level to address their specific needs and interests (NTS 3a)	• Prepare integrated reading and writing lesson plan which addresses the diverse age specific needs and interests of Upper Primary learners with assistance from tutors. • Teach integrated reading and writing using prepared lesson plan to address the needs and interests of diverse Upper Primary learners with support from teacher/mentor.

Course Content	Units	Topic	Sub-topics (if any)	Suggested Teaching and Learning activities to achieve learning outcomes
	1	The concept, types, benefits of reading and writing and misconceptions	1.1 Definition reading and writing 1.1.1 Definitions of reading and writing 1.1.2 Simple views of reading and writing 1.2. Types of reading 1.2.1 Intensive 1.2.2 Extensive 1.2.3 Skimming 1.2.4 Scanning 1.3 Importance of reading and writing in language learning 1.4 Misconceptions about reading and writing and literacy development	• Group Discussion (Introduce the topic to student teachers and then break them into groups and give them different perspectives of defining reading and writing to examine and present their views to the class) • Class discussion (teacher leads discussion by using leading and probing questions to help student teachers to understand the simple view of reading and writing and how they apply to teaching reading and writing in the Upper Primary classroom) • Group work and presentation (Teacher puts student teachers into groups and assigns each group to a type of reading to conduct mini-research on them and present their findings to the class. Encourage student teachers to use online resources) • School Visit and observation: (Student teachers are put in groups and each assigned a type of reading to find out how they are practised in the Upper Primary classroom, the difficulties teachers encounter in using the reading type and what they do to address the difficulties. Student teachers discuss their report in class after the visit). • Think-pair-share (Ask students to do individual research on the importance of reading and writing, share their work with a partner and finally share with the class) • 6. Think-Pair-Share (student teachers work individually to find out misconceptions teachers have about reading and writing and literacy development and how to overcome them. They share their thoughts with a partner and later share with class for further discussions)

	2.	Theories and models of reading	2.1. Theories of reading 2.1.1 Cognitive 2.1.2 Schema theory 2.2. Models of reading 2.2.1. Linear model 2.2. 2 Interactive model 2.2.3 Psycholinguistic model	• Debate (After introducing the two theories of reading to students teachers, the class is divided into two groups and each group is assigned one theory to examine and debate on why they think their theory explains reading best) • Demonstration (student teachers are divided into groups and assigned a model to research on and demonstrate how each models is applied to the teaching of reading)
	3	Components and stages of Upper Primary Reading and writing	3.1 Components of Upper Primary reading 3.1.1 Phonological awareness 3.1.2 Phonemic awareness **3.1.3. Fluency** **3.1.4 Vocabulary** **3.1.5 Comprehension** 3.2 Stages in Upper Primary Reading 3.2.1. Reading for learning 3.2.2 Confirmation for reading/transitional reading 3.2.3 Reading for learning 3.3 Stages in Upper Primarylearner's writing development 3.3.1. Writing simple sentences 3.3.2 Transitional phrases 3.3.3 Paragraph writing 3.3.4 Standard spelling	1. School visits (Student teachers visit basic school to interact with Upper Primary teachers on the components of reading and how they develop them in their classrooms. 2. Report writing (student teachers write report on their school visit and observation and discuss them with their teacher in class) 1. Group Discussion and Presentation (Student teachers are put into groups bearing in mind inclusivity and assigned a stage in Upper Primary reading to find out about its characteristics and appropriate activities that correspond with it. The groups then present their work to the class for further discussion) 2. Group Discussion and Presentation (Student teachers are put into groups bearing in mind inclusivity and assigned a stage in writing to find out about its characteristics and appropriate activities that correspond with it. The groups then present their work to the class for discussion)

			3.3.5 Writing simple expressive texts	
	4	Approaches to teaching Upper Primary reading and writing	4.1 Approaches to teaching reading 4.1.1 Whole language 4.1.2 Phonic and whole language combined 5.2 Reading development Practices 5.2. 1 Reading aloud 5.2.2 Silent Reading 5.2.3 Language Learning Experience 4.3 Writing Development practices 4.3.1Modelled writing 4.3.2Shared writing 4.3.3 Guided writing 4.3.4 Independent writing	1. Discussion (Teacher leads class discussion on the various approaches to teaching Upper Primary reading using whole language approach, as well as focusing on their advantages and disadvantages) 2. School visit (trainee teachers visit school to acquaint themselves with approaches used by teachers to teach Upper Primary reading) 3. Demonstration/Role-play (Student teachers work in pairs using one phonic approaches to teach reading 4. Project Work/Seminar (Student teachers are put into groups bearing in mind inclusivity and assigned a reading and writing development practice to find out about their nature, how they are used in developing reading skills of learners and their advantages and disadvantages. Each group then present its work to the class for discussion 5. Teacher led Discussion (Teacher leads discussion on the practices of developing learners writing and their application in the classroom. Teacher creates an environment to make student teachers contribute effectively. This is followed by teacher demonstration on how the models are used in the teaching of Upper Primary writing.) 6. Checklist (Student teachers cross check their objectives before and after discussing the Unit to find out if their expectations were met).

	5	Reading and writing problems of Upper Primary learners	5.1. Reading problems of Upper Primary learners 5.1.1lack of word decoding 5.1.2 lack of vocabulary 5.1.3 lack of fluency 5.1.4 lack of speed 5.2 Remedies of reading Problems 5.2.1 Guided reading 5.2.2 Reading aloud 5.2.3 Silent reading 5.2.4 Repeated oral reading 5.2.2 Reading familiar books 5.2. Writing problems of children 5.3. 1 Dysgraphia 5.3.2 Dyslexia 5.3.3. Expressive language problem 5.3.4 Dyspraxia	Video (Teacher introduces and discusses reading problems of children with student teachers. Student teachers watch Ghanaian videos of Upper Primary learners reading and identify specific reading problems and discuss them in class) 2. Child study (Student teachers work in pairs to select an Upper Primary learner and identify the causes of the reading problems the learner has and find out ways of addressing the problems by working with them). 3. Group Discussion (Student teachers work in groups to examine the causes of learners writing problems and find ways in which they can help Upper Primary learners overcome their writing problems and share their findings with the class).
	6	Technology and developing Upper Primary Reading and writing materials	1.1.1 What are reading and writing LTMs 6.1.2 Using technology to prepare and use Upper Primary reading and writing materials 6.1.3 Challenges of using Technology to produce materials for teaching Upper Primary reading and writing	1. Group Work (Student teachers work in groups and research on factors that affect the preparation and use of reading and writing materials for Upper Primary learners and present to class) 2. Technology use (student teachers learn how to use computer to develop a reading and writing material and also use online speaking materials as teaching resource) 3. Demonstration (Student teachers prepare their own teaching materials using technology and use them to teach a selected topic which addresses the diverse needs and interests of learners in reading and writing in the Upper Primary classroom)

				4. Discussion (student teachers work in groups to discuss the challenges they face using technology to produce TLMs and how to address the challenges)
	7	Assessing Upper Primary reading and writing	Types of Reading assessment tools and their uses 7.1.1 Upper Primary Reading Assessment (EGRA) 7.1.2 Assessing Comprehension 7.1.3 T-Master 7.1.4 Test of Word Reading Efficiency 7.1.5 EDRA (Upper Primary diagnostic Assessment) 7.1.6 Standard Reading Assessment 7.2 Problems of assessing reading 7. 2 Assessing Upper Primary writing 7.2.1.1 EGWA uses and problems	1. **Group Work and presentation** (Student teachers work in groups on assigned writing or reading assessment tool and find out how they are used in assessing learners, reading and writing skills and present to class for discussion) 2. **School Visit** (Student teachers visit schools and use the assigned assessment tool to assess learners. They also enquire from classroom teachers how they use such assessment tools in assessing the reading and writing skills of Upper Primary learners. They also discuss the difficulties they have in using the assessment tools and how they address such difficulties. They write their report and present to class for discussion)
	8	The Reading and Writing Component of the Upper Primary Curriculum	8.1 Interpreting the Upper Primary reading and writing content in the Upper Primary curriculum 8.2 Deficiencies in the Upper Primary reading and writing curriculum 8.3 Planning scheme of work	1. Discussion (Student teachers discuss the reading and writing components of the Upper Primary curriculum with teacher to examine its contents and identify their deficiencies and their effects on teaching and learning reading) 2. Group work (student teachers are put in groups to brainstorm on strategies for dealing with deficiencies in the Upper primary reading and writing component of the curriculum and present their findings to the class) 3. Prepare a scheme of work from the reading and writing component of the Upper Primary curriculum.
	9	Integrated reading and writing Lesson Plan	9.1 Interpreting the Upper Primary reading and writing content in the Upper Primary curriculum 9.2 Deficiencies in the Upper Primary reading and writing curriculum 9.3 Planning scheme of work	1. Practical work (Student teachers work in pair to design an integrated reading and writing lesson plan bearing in mind the diverse learners and their needs and interests in the Upper Primary classroom). 2. Practical work (Student teachers work in pairs to co-teach using the integrated reading and writing lesson designed.

Course Assessment (Educative assessment of, for, and as learning)	**Component 1**: Summary of Assessment Method: 1 end of semester examination and 2 diagnostic quiz on the concept and role of reading and writing in language acquisition and literacy development, use of appropriate strategies to teaching reading and writing, assessment tools used to assess reading and writing, use of technology in teaching reading and writing and interpreting and understanding the Upper Primary reading and writing components of the Upper Primary curriculum and its deficiencies. *(cores skills targeted are communication, collaboration, team work, creativity, and digital literacy)* Weighting: 40% Assesses Learning Outcomes: (Course Learning outcomes to be measured 1 – 8)
	Component 2: Assessment for and as learning (formative) Summary of Assessment Method: 2 Group presentations, 1individual presentations and class participation *(core skills targeted are communication, team work, creativity, digital literacy)* Weighting: 30 % Assesses Learning Outcomes: Learning outcomes measured are 3, 4 and 7-9.)
	Component 3: Assessment of learning **Summary of Assessment Method:** 2 school visit/co-teaching (1 observation and 1 co-teaching) and 1 report writing on how teachers teach and assess reading and writing at the Upper Primary level *(core skills targeted are communication, collaborations, inclusivity, and creativity)* **Weighting:** 30 % **Assesses Learning Outcomes:** Learning outcomes measured are 3, 4 and 7-10.
Instructional Resources	1. Reading Rocket http://www.readingrockets.org 2. Teaching reading in primary schools - unesdoc.unesco.org/images/0013/001351/135162eo.pdf 3. Videos – a.Reading and writing teaching techniques b. How to teach reading with phonics Reading Rockets – Teaching writing http://www.readingrockets.org/ 4. Writing A-Z - Online Writing Lessons and Materials https://www.writinga-z.com/ 5. Resources for Grades 1-2 – Read Write Think www.readwritethink.org › Classroom Resources

	6. Video Recorders – a. Teaching proper pencil grip to KG learners b. Reading and writing teaching techniques 7. Cameras
Required Text (Core)	Owu-Ewie, C. (2018). *Introduction to language teaching skills: A resource for language teachers.* Accra: Samwoode Publishers Smith, J. A. & Read, S. (2009). *Early Literacy Instruction: Teaching Reading and Writing in Today's Primary Grades (2nd Edition)*. New York, NY: Pearson Publishers.
Additional Reading List	Carroll, M. J., Bowyer-Crane, C., Duff, F. G., Hulme, C. & Snowling, M. J. (2011). Develo*ping language and literacy: effective intervention in the early years*. West Sussez, UK: Wiley-Blackwell. Daniels, H., Zamelman, S. & Steineke, N. (2007). *Content-area writing: Every teacher's guide*. UK: Heinemann Educational Books. Gove, A. & Wetterberg, A. (2011). *The Upper Primary Reading Assessment: Applications and Interventions to Improve Basic Literacy.* Research Triangle Park, EGRA, NC: RTI Press. Smith, J. A. & Read, S. (2005). *Early Literacy Instruction: A Comprehensive Framework for Teaching Reading and Writing, K-3.* New York, NY*:* Pearson Publishers

Mathematics /Numeracy

CONTEXT

While the vast majority of children in Ghana are enrolled in school, far fewer are learning. Evidence from national and international assessment (NEA, EGRA & EGMA) show over 75% of children in upper primary in Ghana failed to carry out reading and mathematics tasks which most children at this age are expected to know, understand and be able to do. The low performance is largely as a result of how mathematics is taught by teachers which, in turn, is informed by a teacher education programme that appears irresponsive of the imperatives of the upper primary curriculum. The current DBE curriculum is weighted heavily towards subject-content knowledge to the detriment of curriculum space for developing understanding of pedagogy and practical classroom teaching skills. There is also disconnect between the current pre-service DBE curriculum and the upper primary curriculum.

Given the incredible power that teachers hold to making a difference to pupils' mathematical development, a reasonable point of entry for changing the narrative is a teacher education curriculum that is reflective of the exigencies of today's upper primary numeracy classroom. This course plays an important role in this regard. The course is intended to address the foregoing issues by providing student teachers opportunity to develop a comprehensive understanding of the upper primary curriculum. Emphasis is placed on strategies for teaching and assessing student teachers acquisition of mathematical concepts and pedagogies relating to Number, Shape and Space, and Handling data as well as identifying learners thinking and understanding and correcting misconceptions in these content area. When student teachers are familiar with and have solid understanding of the teaching and assessment requirements in upper primary curriculum, it can shape their classroom practice and augment efforts to improve learning outcomes.

Course Delivery Modes *(Please, double click and check)*	**Face-to-face** ☒	**Practical Activity** ☒	**Work- Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Pre-requisite	**Teaching and Assessing Upper Primary Mathematics 1**						

Course title:	**Teaching and Assessing Mathematics for Upper Primary (Intermediate)**		
Code:	**Course Level: 300**	**Credit Value: 3**	**Semester 1**
Course Description	In this course, student teachers will develop an understanding of the Ghanaian Curriculum for Change and Sustainable Development: Numeracy Standards for P4-P6. They will use the knowledge of theories in upper primary learning and teaching of mathematics to enable them to conceptualise, plan and design learning, teaching and assessments. They will consider a range of strategies including play-based and inquiry learning as well as interpret student thinking and diagnose misconceptions to improve student learning. They will also explore the linkages with literacy, numeracy and ICT and develop their pedagogical content knowledge in upper primary numeracy teaching. There is the need to do auditing of subject knowledge to establish and address student teachers' learning needs, perceptions and misconceptions in of topics within the upper primary mathematics curriculum. Topics covered in this course include key mathematical concepts in the Number, Shape and Space, and Handling Data, in the upper primary mathematics curriculum. A combination of face-to-face sessions, practical activities, independent study, seminars and e-learning opportunities will be used to deliver the course. Differentiated approach to teaching will be used to ensure that student teachers will be supported in the		

	Teaching and Assessment of Upper Primary Mathematics. The instructional strategies will pay attention to all learners, especially girls and students with Special Education Needs. The course will be assessed using a variety of assessments methods including coursework, assignments, quizzes, project works with presentation and end of semester examination to provide a comprehensive outlook of student teachers competencies, values and skills. (NTECF, p. 21, 45; NTS 1a, 2c, 2e)	
Course Learning Outcomes (CLOs) with indicators	**Outcomes**	**Indicators**
	On successful completion of the course, student-teachers will be able to: 1. Demonstrate deep understanding of key mathematical concepts in the Number, Shape and Space, and Handling data, in the basic school mathematics curriculum. This should include identifying ways of representing numbers and establishing relationship among geometric shapes (NTS, 2c)	• Select and use the most appropriate mathematical method(s) or heuristics in carrying out tasks/exercises/problems in Number, Shape and Space and Handling data within the basic education mathematics foundation list. • Make connections between mathematical co**nce**pts in the Shape and Space and Handling data content domains and applying them to lesson planning. • Identify and resolving mathematics related learning difficulties within Number, Shape and Space, and Handling data content domains. (PP 22) • Make and test conjectures about properties of geometric shapes and develop relationships to develop logical arguments and to justify conclusions. • Identify, compare, and analyse attributes of two- and three-dimensional shapes and to develop vocabulary to describe their attributes.
	2. Use manipulatives and other TLMs including ICT in a variety of ways in learning mathematics concepts in Number, Shape and Space, and Handling data (NTS, 3j);	• Use manipulatives and other TLMs to develop the concepts of Number, Shape and Space, and Handling data. • Use drawing tools to conduct geometrical investigations emphasising visualization, pattern recognitions, conjecturing, etc. • Solve mathematics problems using manipulatives and/or technology related strategies in a variety of ways.

	3. Begin to develop skills for diagnosis and remediation, assessment resources/records, and monitoring progress (NTS, 3j)	• Engage in designing tools to diagnose misconceptions and designing/implementing remediation • Identify resources/records that should be for effective classroom assessment in specialism - including examples of standardised tests (NEA), teacher made tests, record sheets, cumulative records forms, report forms, etc., • Study and complete student's cumulative record form • Analyse learners' performance (or assessment data) to provide feedback to stakeholders
	4. Value as well as respect equity and inclusivity in the mathematics classroom (NTS, 1e; NTECF, p.38)	• Demonstrate awareness of own self and of students as unique individuals • Appreciate the contributions of, and supports, colleagues in the mathematics classroom. • Cooperate with colleagues in carrying out mathematics tasks in Number, Geometry and Handling data. • Engage in reflective thinking about how mathematics was taught in student-teacher's basic school days.
	5. Demonstrate awareness of Socio-cultural issues in teaching and learning mathematics in the content domains of Number, Shape and Space, and Handling data (NTS, 1e; NTECF, p.39).	• Reflect and showing how an individual's previous mathematics background influences his/her views of mathematics and its learning. • Identify appropriate social contexts and TLMs for teaching topics in Number, Geometry and Handling data • Recognize geometric concepts embedded in our local fabrics and • other designs • design investigations to address a real life question and consider • how data collection methods affect the nature of the data set

Course content	Unit	Topics	Subtopics	Teaching and learning activities to achieve learning outcomes
	1	Counting, Patterns and Relationships	Counting and representing numbers in multiple of ways and indifferent bases Number patterns and relationships; numerical and non-numerical patterns; investigations with numbers; sets of numbers – odd, even, composite, prime, multiples, factors, LCM, HCF, relatively prime numbers, etc. (e.g. 10 ones = 1 ten 10 tens = 1 hundred, etc.)	Verbal exposition and discussions on counting activities (supported with video clips and TLMs): skip counting to 10,000,000 by 2s, 5s, 10s, 25s and 100s, starting at a multiple of these numbers; Problems involving the relative size of numbers or comparing; Playing mental games Use investigations to explore relationships among the properties of prime and composite numbers (by using divisibility rules); even and odd numbers; factors and multiples; LCM, HCF, and the product of numbers whose HCF and LCM are being sought. Use directed and guided independent study to find HCF and LCM by intersection of sets, as well as, from prime power representations.
	2	Place value	Concept of place value; children's knowledge of and misconceptions of place value; meaning of and relationship between operations; mental strategies and other problem solving strategies; dealing with operations on numbers up to 10,000,000.	Use interactive collaborative group work to explore the place value structure of the base ten number system, to represent and compare whole numbers Use manipulatives and/or technology related strategies in a variety of ways to establish the relationships between addition and subtraction, as well as multiplication and division.
	3	Fraction concepts	Meaning of fractions; building an understanding of common fractions, decimal fractions and percent and the relationships between and among these concepts; representations of fractions; finding equivalent	Student-teachers explore the meaning and interpretations of fractions through small group activities and presentations. Use area model or any similar manipulative to explore the relationships among common fractions, decimal fractions, and percent. Engage student-teachers to develop the concept of

			fractions; comparing and ordering fractions.	equivalent fractions using models and multi-purpose chart (multiplication table). Use knowledge of equivalent fractions to compare and order fractions.
	4	Operations on fractions	Mental strategies for adding, subtracting, multiplying and dividing by fractions; Basic applications of fractions to real life.	Use interactive and collaborative group work to develop strategies for adding and subtracting fractions. Student-teachers are engaged in using manipulatives and other models to develop strategies for multiplication and division of fractions.
	5	Micro Lessons and use of technology across upper primary numeracy	Importance of lesson planning Micro lesson planning formats Design of micro lessons Engagement in micro teaching with peers Exploration of technology use in the upper primary	Use verbal exposition and discussions on importance of lesson planning, micro lesson planning formats and technology use in teaching numeracy in the across upper primary Read teaching scenarios (and/or watching video clips} on teaching numeracy in the upper primary and doing a critic based on using mathematical learning theory and knowledge of curriculum content, pedagogy and resources to critique a mathematics lesson Engage in micro lesson design, teaching with peers and doing critics Observe and reflect upon how mathematics lessons are currently taught in schools
	6	Diagnosis and remediation; assessment resources/records, and monitoring progress	Misconception diagnosis, Classroom assessment resources and records Interpreting data/reports on performance and providing feedback Evaluating performance and monitoring Progress,	Design tools to diagnose misconceptions and designing/ implementing remediation Identify resources that should be available in the classroom for effective assessment in specialism - including examples of standardised tests (NEA), teacher made tests, record sheets, cumulative records forms, report forms, etc., Study and complete student's cumulative record form Analyse learners' performance (or assessment data) to provide feedback to stakeholders – students, colleagues and parents, PTA and role playing a School Performance Appraisal Meeting (SPAM)

	7	Shape, Space and Measurement	Spatial visualization; the concept of space; line segments, angles and shapes; 3-D (faces, vertices, edges and their relationships) and 2-D shapes (types and properties); Measurable attributes of objects including length, angle, area, volume and capacity, mass, weight, time and money	Provide student-teachers with e-learning opportunities to explore the concept of shape and space. Use models of 3-D shapes for practical investigation to explore the relationship among the number of faces, edges, and vertices of given shapes. Use guided independent study, student-teachers find areas and perimeters of 2-D shapes. Use individual/group project work to develop understanding of such attributes as length, angle, area, volume and capacity, time, and money.
	8	Handling Data and Chance	Collecting, interpreting and presenting data in multiple ways; measures of central tendencies, graphical or pictorial, representation (stem and leaf plots, five number summary, box plots). Chance: sample space; events; basic properties of chance.	Use group and individual projects to collect data based on events happening within and out of the school organization. Use group and individual presentations to discuss how to organize, present, and interpret the data collected. Use games and practical activities to introduce the concept of chance. Engage student-teachers through group work to explore the concepts of sample space, events, and basic properties of chance.
Course Assessment (Educative assessment: of, for and as learning)		**Modes of Assessment of Indicators**		
		COMPONENT 1: Examination **Summary of Assessment methods:** Learners should be summatively assessed by an examination linked to the themes listed below – selecting and using the most appropriate mathematical method(s) or heuristics in carrying out tasks/exercises/problems in number, shape and space and handling data within the basic education mathematics foundation list. – making connections between mathematical concepts in the shape and space and handling data content domains and applying them to lesson planning. – identifying and resolving mathematics related learning difficulties within number, shape and space, and handling data content domains. – making and testing conjectures about properties of geometric shapes and develop relationships to develop logical arguments and to justify conclusions.		

	– identifying, comparing, and analysing attributes of two- and three-dimensional shapes and to develop vocabulary to describe their attributes. **Weighting**: 40% **Assesses Learning outcomes:** CLO 1-5 (NTS 2c)
	COMPONENT 2 : Coursework 1 **Summary of Assessment methods:** *Individual/Group Assignments with Presentations* for student teachers to – use manipulatives and other TLMS to develop the concepts of number, shape and space, and handling data. – use drawing tools to conduct geometrical investigations emphasising visualization, pattern recognitions, conjecturing, etc. – make connections between mathematical concepts in the shape and space and handling data content domains and applying them to lesson planning. – identify, comparing, and analysing attributes of two- and three-dimensional shapes and to develop vocabulary to describe their attributes. – participate in activities that can make children mathematically proficient; that is, understand mathematical ideas, compute fluently, solve problems, and engage in logical reasoning *Diagnostic Assessment:* Student teachers should – explain syllabus guidelines for classroom assessment – make connections between mathematical co**nce**pts in the shape and space and handling data content domains and applying them to lesson planning. – identify and resolving mathematics related learning difficulties within number, shape and space, and handling data content domains. – solve mathematics problems using manipulatives and/or technology related strategies in a variety of ways **Weighting: 40%** **Assesses Learning outcomes: CLO 1-4 (NTS 2c)**

	COMPONENT 3: Coursework 2 **Summary of Assessment methods:** *Group Authentic Assignments/Project with Presentations*: Student teachers should be provided *college-based* assessments tasks to – use manipulatives and TLMs in establishing mathematical principles. – Use ICT as a tool in supporting beginners in learning number – Identify and addressing socio-cultural issues emerging from teaching and learning geometry and statistics Student teachers should be provided *school-based* assessment tasks to – observe mathematics lesson to describe the nature of the following teaching activities initiated by teacher and time devoted to these: verbal exposition; – engage in designing tools to diagnose misconceptions and designing/implementing remediation – identify resources/records that should be for effective classroom assessment in specialism - including examples of standardised tests (nea), teacher made tests, record sheets, cumulative records forms, report forms, etc., – study and complete student's cumulative record form – analyse learners' performance (or assessment data) to provide feedback to stakeholders *Self/Peer Assessment*: Student teacher should conduct self or peer assessment to rate/evaluate their – awareness of own self and of students as unique individuals – enjoyment and confidence in doing mathematics – appreciation of the contributions and support of colleagues in the mathematics classroom. – cooperation with colleagues in carrying out mathematics tasks in Number, Geometry and Handling data. **Weighting: 20%** **Assesses Learning outcomes: CLO 2-5 (NTS 2c)**
Teaching/ Learning Resources	Maths posters; Manipulatives and visual aids Computers and other technological tools Set of Mathematical instruments Geoboard (Geodot)
Required Text (Core)	Martin, J. et. al. (1994). *Mathematics for teacher training in Ghana: Tutor notes & students activities* [Chapter 2]. Accra Unimax Publishers.
Additional Reading List	Ministry of Education (2018). *Primary school mathematics standards*. Accra: Ministry of Education.

Science

CONTEXT

The primary school science seems not to relate to the child's environment, but science is full of activities and so teachers must realise this and take advantage of the way children learn, which is through play. This will imply engaging in integrated and innovative teaching- bringing in ideas to facilitate concept formation from various disciplines, cultures and activities, as children, easily get fed up with repetitive events. The Learning activities for the semester must make the science content relate more to learners' environment, be gender friendly and provide for professional scientific attitudes and skills growth among student teachers. Some of the skills expected to be inculcated by learners would be critical thinking, honesty, patience, sincerity, precision, and accuracy. Lessons/activities must be culturally relevant and sensitive-friendly within the appropriate local dialect and/or practices. Again the course will provide for the student teacher to manage such limitations that could prevent students of diverse abilities and strengths from participating in any science lesson.

Course Title	**Integrated Science III for Upper Primary**						
Course Code		**Level 300**	**Credit value: 3**		**Semester 1**		
Pre-requisite	Integrated Science II for Upper primary						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description	The course for semester one of year two, Integrated Science for Upper Primary III, uses the universal design for learning approach to extend the basic science concepts of the student teacher on the following content areas: flowers, fruits and seeds, air and water, human body systems, light, changes of state of matter and science curriculum studies. This is done through appropriate pedagogies such as Talk for learning approaches, demonstrations, concept mapping, problem-based teaching/learning and video presentations Authentic assessments mode such as concept mapping, using checklist to identify values and attitudes and, mind maps from which provides for the teachers' attention on the need to ensure equity and the provision for SEN will be used to evaluate the student teacher's level of understanding and learning. This course emphasizes the essential attitudes and values of professional science teaching such as honesty, carefulness and accuracy. The student teacher, in this course, should be introduced to issues of transition in terms of use of the English Language as medium of instruction and characteristics and learning styles of early adolescent (NTS 1a -1c. p12;2c&2e, p. 13).						

Course Learning Outcomes	**Outcomes** On successful completion of the course, Student teachers will be able to:			**Indicators**
	1. Identify parts of a flower and classify fruit and seeds based on their characteristics (NTS 3a, 3h, p14: NTS 2c, 2d, 2e, p13)			• Produce a chart on parts of flower and their functions • Present reflective report on the uses of flowers • Produce a chart on different types of fruits and seeds based on their characteristics • Present reflective report on methods of dispersal of fruits and seeds
	2. Discuss the composition of air and its properties (NTS 3a, 3h, p14: NTS 2c, 2d, 2e, p13)			• Produce a chart on composition of air • Prepare reflective report on the properties of air
	3. Recognize the stages/phases of water cycle and discuss how the phases are related (NTS 3a, 3h, p14: NTS 2c, 2d, 2e, p13)			• Draw a chart to show phases or stages of the water cycles • Present a report that shows how phases of water cycles are related
	4. Demonstrate basic and higher level of thinking skills in planning to teach, assessment and reporting (NTS p13: 2, 14)			• Provide checklist to identify appropriate planning skills 4.2. • Produce reflective report on assessment styles that will present the expected learning behaviour.
	5. Plan and deliver varied lessons in a differentiated and inclusive manner that will produce the intended learning outcomes (NTS p13: 2)			• Produce lesson plan with well-defined intended outcomes • Prepare reflective report on lesson delivery.
Course Content	**Units**	**Topics**	**Sub-Topics (if any)**	**Teaching and Learning activities to achieve learning outcomes**
	1	**Flowers, Fruits and seeds**	1.1 Flowers and their parts 1.2 Uses of flowers 1.3 Pollination and fertilization 1.4 Fruits and seeds 1.5 Dispersal of fruits and seeds	• Shower thoughts approach on definition of flower • Use practical activities for student teachers to identify parts of the flower and discuss their function • Teacher led-Student teachers discussion on uses of flowers • Video/ Computer Animations on pollination, fertilization (provide appropriate resources/materials to ensure that all students participate fully) • Use practical activities for student teachers to identify from a collection of different types of fruits • Practical activities to identify differences between fruit and seed

				• Demonstrate dispersal (throwing) of seed and fruit and discuss the advantages of dispersal of seeds and fruits (provide appropriate resources/materials to ensure that all students participate fully)
	2	**Air and Water**	2.1 Composition and properties of air and water 2.2 Uses of air and water 2.3 Conservation of water	• Use experiment to determine the composition of air and investigate their properties • Group discussion on the uses of air and water • Discussions on ways of conserving water. Ensure that all student teachers participate in the discussion and the activities
	3	**Human body systems**	3.1 Organ systems and their functions 3.2 Interdependence of organ systems	• Group discussions and student teachers to design jigsaw activity on the organ systems of humans and their functions • Video/ Computer Animations on the interdependence of the human organ systems
	4	**Light**	4.1 Light as a form of energy and sources of light 4.2 Colours that make up white light and rainbow 4.3 Transparent, translucent and opaque materials	• Use high order questioning to describe light as form of energy and sources of light • Use practical activities involving prism and source of light to demonstrate formation of rainbow and identify the colours that make up white light • Practical activities with different materials to determine whether they are transparent, translucent or opaque
	5	**Changes of state of matter**	5.1 Changes of states (melting, evaporation, boiling, condensation, freezing and sublimation)	• Discussions of processes involved in change of state of forms of matter and present the processes in a concept map • Demonstrate the processes involved in change of state of solid to liquid and gas, solid to gas and gas to solid.
	6	**Science curriculum studies**	6.1 Science pedagogies 6.2 Lesson planning and co-teaching	• Talk for Learning Approaches/Discussions /Student Teacher presentations on instructional strategies for early adolescents and their learning styles • Student teachers to develop lesson plans for co-teaching • (Provide opportunities for all student teachers to participate in the activities)

	Component 1: Assessment for, as and of Professional Values and Attitudes Summary of Assessment Method: *(Note: Choose one of the following for assessment)* Quizzes/Exams/Report writing/Poster/Presentations/ Professional portfolios Core skills to be acquired: Honesty, carefulness, accuracy and tolerance Weighting: 40 % Assesses Learning Outcomes: CLO 1, CLO2, CLO3, CLO 4 AND CLO5
Course Assessment	**Component 2**: Assessment for and as Professional Knowledge Summary of Assessment Method: *(Note: Choose one of the following for assessment)* Presentations/Concept Mapping/Practical Activities(evidence of values learned)/Group work(Evidence of equity and inclusivity)/transferable skills Core skills to be acquired: Cognitive, literacy, numeracy, writing and reading Weighting: 40% Assesses Learning Outcomes: CLO 4 & CLO5
	Component 3: Assessment for, as and of Professional Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)* Peer Review / evidence of portfolio/lesson plan and annotations/tutorial meetings with the student to discuss their teaching observation progress and areas for development. Core skills to be acquired: Pedagogical, operational and cooperative skills Weighting: 20% Assesses Learning Outcomes: CLO 4 & CLO5
Instructional Resources	Some resources that would be required to successfully enable an inclusive integrated science teaching would be Laboratory equipment, Chemicals, Smartphones, Tablets, Laptops, Desktop computer, Productivity tools (software that allow teachers to work better), Subject based instructional tools/applications, Open ERs – YouTube, projectors and virtual laboratories
Required Text (Core)	Abbey, T. K., Alhassan, M. B., Ameyibor, K., Essiah, J.W., Fometu, E., & Wiredu, M. B. (2008). *Ghana Association of Science Teachers Integrated Science for Senior High Schools.* Accra: Unimax MacMillan.
Additional Reading List	Abbey, T.K., &Essiah, J.W. (1995). *Ghana Association of Science Teachers Physics for Senior High Schools.* Accra: Unimax Macmillan. Ameyibor, K., & Wiredu, M. B. (2006). *Ghana Association of Science Teachers Chemistry for Senior High Schools.* Accra: Unimax MacMillan. Oddoye, E.O.K, Taale, K. D., Ngman-Wara, E., Samlafo, V., & Obeng-Ofori, D. (2011). *SWL Integrated Science for Senior High Schools: Students Book*. Accra, Ghana: Sam-Woode Ltd. Zumdahl, S. S., &Zumdahl, S. A. (2009). *Chemistry*. Belmont, CA: Cengage Learning.

Music & Dance and PE

Context

The *Sport, PE, Music and Dance in Local and Global Cultures for Upper Primary* course will be taught in a one-three-hour session in each week. Every 3-hour session in a week should be taught to promote the inter-disciplinary connections. It is recommended that extended evening practices should be required at least 3-days in a week from 3:30pm to 5:30pm each day to practice skills and concepts introduced in-class. This arrangement will allow **Physical Education** and **Music and Dance** course to alternate with **Social Studies** and **TVET**, increase opportunity to respond, and allow student teachers to master the content and address persistent CONTEXT and misconceptions such as:

1. **Exercising is culturally meant for boys not girls.** Despite the benefits derivable from participation in dance as exercise/physical activity, our cultural heritage frowns on girls exercising to derive the desired health benefits in dance as exercise. Dance as exercise, coupled with traditional music promotes cohesion, collaboration/cooperation, gender equity, tolerance
2. **There is a wide cultural belief that girls who participate in exercise cannot get pregnant or give birth.** This myth has caused many young girls to shy away from moderate to vigorous intensity movements in dance and exercise. Thus, many girls are deprived from getting the health-related benefits associated with exercising. On the contrary, for girls who live in the rural areas, home chores, farming, and cutting firewood are routine vigorous intensity activities that support health-related needs of girls
3. **Physical education sport, music and dance content are not as important as numeracy and literacy content**. The content and the pedagogical experiences will reveal that physical education, sport and music are unique and worthy in their own right and cannot be compared to numeracy and literacy content. It will further reveal that, numeracy and literacy content can be reinforced in physical education, music and dance settings

Course Title	**Sport, PE, Music and Dance in Local and Global Cultures for Upper Primary**						
Course Code				**Course Level: 300**		**Credit value: 3**	**SEMESTER 1**
Pre-requisite							
Course Delivery Modes	**Face-to-face**[1] ☒	**Practical Activity**[2] ☒	**Work-Based Learning**[3] ☐	**Seminars**[4] ☐	**Independent Study**[5] ☒	**E-learning Opportunities**[6] ☒	**Practicum**[7] ☐
Course Description (indicate NTS, NTECF to be addressed)	The course focuses on appreciation of Sport, PE, Music and Dance in local and global cultures. The course will assist student teachers to develop appreciation skills and apply them to both local musical, dance and sports cultures (traditional games and dances, patriotic songs, folksongs as well as popular music such as highlife, hip-life, gospel, etc.), and global musical, dance and sport cultures (emphasis on common "classical" music that are featured in our day to day religious activities such as weddings, burial, western and non-western sports/games such as football, basketball, cricket and Islamic and Asian songs etc.). Additionally, student teachers shall be exposed to elements and instruments that are employed in the creation and performance of Music and Dance as well as equipment and materials that are employed in PE and sport settings. Above all, student teachers will						

	demonstrate understanding by differentiating among the musical types visually and aurally. They will also be required to display cross-disciplinary connections by demonstrating how physical activity and music communicate healthy life, social, personal, cultural, or abstract themes from gestures. Furthermore, student teachers will be taken through comprehensive experiences on pedagogical knowledge (PK), pedagogical content knowledge (PCK/TPACK) on one hand and developing positive professional attitudes and values with regards to the teaching of Physical Education and Music and Dance including inclusion, cross-cutting issues as well as the core values of the NTECF: honesty, perseverance and grit, teamwork, creativity, innovation and citizenry. The specific strategies for delivery will include analysis of documentaries orally and by written report; group presentations orally and by written reports; assessment instrument development project; portfolio building; macro-teaching; singing-along, using ICT tools to assemble patriotic songs and demonstration of fundamental movement patterns with music. The strategies will ensure that all activities are respectful of every child's right to education as well as ensure that all children can learn and benefit from education. Modes of assessment will include summative (40%), formative (40%) and practical work and portfolio building (20%). The course will finally focus on the teacher being responsible for all students (differentiated learning) and also develop skills of collaboration to support learners. The course will address the following NTS/ NTECF: NTS 2c & 2d, NTECF p16; NTS 2e & 2f, NTECF p16; NTS 2e, NTECF p.20; NTECF p.23 & p.51	
Course Learning Outcomes	**COURSE LEARNING OUTCOMES (CLO):** On successful completion of the course, student teachers will be able to:	**INDICATORS**
	CLO 1 Demonstrate comprehensive content knowledge in how Sport, PE, Music and Dance in local and global cultures are appreciated. (NTS 2c & 2d, NTECF p16., & Early-years, Primary and JHS Music and Dance Syllabuses [EPJMDS])	• Mention at least four (4) instruments that are used in the music, and the role they play and describe the form of the music • Conduct post-game analysis on selected three (3) sports disciplines.
	CLO 2 Use audio-visual materials and other TLMs including ICT in a variety of ways in listening/watching and appraising physical activity and musical concepts. **NTS** 2c & 2d, 3j; **NTECF** p16.	• Select the most appropriate method(s) (e.g., watching documentaries with ICT resources, group presentations, demonstration on instruments, singing-along ICT resources, one-on-one instruction, and justify the selection and interpret the results.

	CLO 3 Demonstrate in-depth knowledge of inclusive professional values and attitudes enshrined in the policy documents of NTS, IEP, NTECF, GES-PESIG, and EPJMDS. (**NTS 1 a, c, & f**2e & 2f, **NTECF** p16.		• State at least 5 professional values and attitudes of the music and dance teacher in the basic schools. • Describe three activities you will put in place to inculcate the core values of honesty, integrity and citizenry in teaching and learning. • Describe two strategies you will employ to address misconceptions about the music and dance discipline.	
	CLO 4 Build vocal repertoire of school assembly songs and fundamental movement concepts and patterns. NTS 2e, 2f, 3h NTECF pp. 20 & 23.		• Perform from memory (a) Ghana Young Patriots; (b) Arise and Shine; (c) Ghana Nyigba; and (d) Monsom, Monsom. • Perform activities like walking, jogging, leaping, hopping, bending, twisting, galloping and skipping. • Create at least two (2) game adaptations that can promote autonomy, leadership, risk taking, cooperation, teamwork and decision-making	
	CLO 5 Understand how children develop and learn in diverse contexts so as to apply this in their teaching. (NTS 2e, NTECF p.20).		5.1 Create at least two (2) game adaptations that can promote inclusivity and gender equity	
Course Content	**Units**	**Topics**	**Sub-topics**	**Teaching and learning strategies**
	1	Sport/PE and Art Music in Ghana Foreign sports.	-Soccer, -Basketball -Cricket -Golf -Patriotic songs, -Hymns, -Anthems, -Selected Classical pieces	**Analysis of Documentaries**: Students will listen or watch documentaries: i-Box, ICT resources and YouTube and discuss the elements of music and physical activity and respond and connect to physical activities and musical concepts as they relate to the global recommendations. **Class Discussions**: Student teachers discuss their group analysis on elements of Music and Physical Activities Sports Review/Analysis **Sports Commentary**: Students will watch a short video clip on a football, boxing, etc., game, rehearse its commentary, and present it in class in either first language or second language.
	2	Traditional music/games and sports in Ghana.	-Ampe -Chaskele -Stone passing game -Folksongs, -Game songs -Story telling songs	

	3	Popular Music/Lesser known sport in Ghana	- Gospel music, -Hiplife -Highlife -Badminton - Local wrestling (*Abotire)* -Arm wrestling, -Musical chairs, etc.	**Sports Review/Analysis:** Panel discussions in class. **Listener's Choice:** Coupon would be developed and filled in by class members on their favourite music and one will act as DJ to present the songs. **Group Presentations**: Student will further research the sub-topics and give group presentations in class. **Skill Development:** Develop, demonstrate and practice tactical manoeuvres to show autonomy and creativity through the sporting disciplines.
	4	Global Music and Sports http://anthemworld.com/U.S.A.html	-Black-American, -Islamic Tradition, -Asian Communities	
Course Assessment Educative assessment: of, for, and as learning.				
	Component 1: 40% Examination and Quizzes CLOs 1, 2, 3, & 4 **Component 2:** 40% Analysis of Documentaries orally and written report by responding and connecting to physical activities and musical concepts; Group Presentations orally and written reports, Sports Commentary, Sports Review/Analysis, Listener's Choice and Skill Development. CLOs 1, 2, 3, & 4 **Component 3:** 20 % Portfolio Building and Practical Exams Portfolio Building, Singing-along ICT tools assembly patriotic songs; Demonstration of fundamental movement patterns with music and Develop, demonstrate and practice tactical manoeuvres to show autonomy and creativity through the sporting disciplines. CLOs 4 & 5 The three assessment components must ensure all the modes are respectful of every child's right to education, therefore, taking into consideration strategies that reach all manner of learners in the classroom.			

Instructional Resources	A modest recording and playback gadgets in the classroom or music room. 1. Compact Disc (Audio & Video) player with a recording facility (possibly with a detached microphone) 2. Electronic keyboard with synthesizer 3. Computers (Laptops or PCs) for playing back MP3 and MP4 files. 4. Video Camera, LCD Projector and Screen, Tripod and Monitoring Unit (for listening and recording, viewing and reviewing performances) 5. Few African drums (high-pitched, medium pitched, low pitched, master drum, and donno) Required physical facilities and structures for limited contact sports 1. Cones, markers, whistles, stop watches, 2. Hoola hoops 3. Place mats 4. Playing field 5. Goals Balls and various equipment as needed for limited contact sports 6. https://youtu.be/_MDrb24vfvM. – '*Sounds from Ghana*.' 7. http://anthemworld.com/U.S.A.html 8. https://www.youtube.com/watch?v=4E8o7pPJDh0. – '*Sport Culture and Society*.' 9. https://www.coe.int/en/web/compass/culture-and-sport - '*Culture And Sport*'
Required Text (Core)	Jarvie G. (2006). *Sport, culture and society: An introduction*. New York: Routledge. Agawu, V. K., & Amu, E. (1987). The making of a composer. *The Black Perspective in Music*, 51-63. Agordoh, A. A. (2002). Studies in African music (revised edition). Ho : New Age.
Additional Reading List	Dalla Bella, S., Peretz, I., Rousseau, L. & Gosselin, N. (2001) A developmental study of the affective value of tempo and mode in music. *Cognition*, *80* (3), 1-10. Kamien, R. (2014). *Music An Appreciation*: McGraw-Hill Companies, Inc. Moore, F. A. (Ed.) (2003) *Analyzing Popular Music*: Cambridge University Press: UK. Willoughby, D. (1996). *The World of Music*: The McGraw-Hill Companies, Inc. UK. Turner, B. (2000). 'The Cartesian Myth of Mind and Body'. In Hansen, J. and Nielsen, N. (Eds.) *Sports, Body and Health*. Odense: Odense University Press, 1–19. Walseth, K. & Fasting, K. (2003). Islam's View on Physical Activity and Sport: Egyptian Women Interpreting Islam. *International Review for the Sociology of Sport*, *38*(1) 45–61. Vaugrand, H. (2001). Pierre Bourdieu and Jean-Marie Brohm: The Schemes of Intelligibility and Issues Towards a Theory of Knowledge in the Sociology of Sport. *International Review of the Sociology of Sport*, *36*(2) 183–200.

Supported Teaching in School

CONTEXT

Supported teaching in schools (STS) in year three (3) need to consider planning, placement and classroom practice of the student-teacher in the following CONTEXT which are likely to impact on the effectiveness of placement and practice:

1. The Language policy issues –some student-teachers have not been trained in the dominant L1 to be used as medium of instruction in their placement schools, especially in the upper primary level.
2. Student-teachers often lack knowledge about cultural practices of some of the communities where they are placed.
3. Student-teachers are not adequately equipped to handle issues on ICT integration, equity and inclusivity as well as differentiated learning.
4. Mentors do not usually teach for student-teachers to observe and emulate.
5. Mentors, supervisors and lead mentors are inadequately prepared to support student-teachers.
6. Portfolio assessment, which provides evidence of student-teachers' practice, is not included in their overall assessment which focuses on exams.
7. Knowledge of reflective practice and classroom enquiry is not well developed among student-teachers, mentors, and tutors etc.
8. Poorly resourced partner schools do not provide appropriate environment for practice

COURSE WRITING SPECIFICATION

Course Title	**STS: Embedding Teaching (1)**						
Course Code		**Course Level: 300**	**Total Credit value: 3**	**Semester 1**			
Pre-requisite	**STS: Developing Teaching 1&2** **Pedagogic studies in Year 1 & 2**						
Course Delivery Modes	**Face-to-face**	**Practical Activity**	**Work-Based Learning √**	**Seminars**	**Independent Study√**	**e-learning opportunities√**	**Practicum**
Course Description	STS: Embedding Teaching (1) course is a school-based component of the teacher education programme designed to give student-teachers the opportunity to continue to observe and record wider school life activities and good practices in whole class and small group teaching and learning. The course is mounted to enable student-teachers to teach, motivate, manage and extend the learning of upper primary children, with increasing consistency, whatever their socio-cultural, linguistic background regardless of age, aptitude and ability in the upper primary level. It is expected that student-teachers will develop skills in co-planning and co-teaching sequences of lessons across all required subjects of the school curriculum with their mentors with regard to cross cutting skills and issues of equity and inclusivity. The course will help them to gain the skill to produce and use a variety of teaching and learning resources as appropriate to the context they are working in. Additionally the course will enable them to demonstrate emerging leadership qualities in the classroom and contribute to the wider school life, being guided by the legal and ethical codes of conduct required by the profession. The course will further enable student-teachers to have a growing understanding of the requirements of the National Teaching Standards in terms of their professional practice, knowledge, values and attitudes, and in particular their professional role as teachers with support from their lead mentors/mentors. The course will further help them to set targets and provide evidence of the agreed targets set to improve their teaching and strengthen their skills in keeping a professional teaching portfolio with specific emphasis on refining work from the previous placement years. Assessment of the course will be by the contents in the professional teaching portfolio and evaluation from tutors/mentors (NTS, 1b, 1c, 1d, 1f, 2f, & 3g). The course duration is: One day per week in school for **6 weeks** for whole class and school observation with directed task by mentor in **School 3.**						

Course Learning Outcomes	OUTCOMES **Upon completion of the course, student-teachers will be able to**:	INDICATORS
	CLO 1. Demonstrate knowledge and skills in observing, teaching (small group e.g. 4 upper primary children), motivating, managing and extending the learning of upper primary children, with increasing consistency, whatever their socio-cultural, linguistic background and regardless of age, aptitude and ability (NTS. 2d, 2f). **(School induction by school heads, lead mentors and mentors in School 3)**	• Provide an outline of observation plan for small group support and management. • Provide report of planned activities indicating how student-teachers' teach, motivate and manage small group of 4 upper primary children's learning with consistency, diversity, inclusivity and equity under the supervision of mentor. • Show records of specific observations from wider school environment and induction in **School 3.**
	CLO 2. Demonstrate emerging leadership qualities in the upper primary classroom and to contribute to wider school life, being guided by the legal and ethical codes of conduct required by the profession (NTS, 1c, & 1e).	• Provide schedule of classroom routine duty roster and rules and regulations set with learners. • Show records of active participation in school clubs & co-curricular activities. • Provide notes taken during participation in staff, PTA, SMC and CPD meetings.
	CLO 3. Demonstrate knowledge and skills in generating evidence to show how they are meeting the National Teachers' Standards with the support from their mentors (NTS, 2a, & 3f)	• Provide plan of activities on set targets agreed upon with mentor from the Teachers' Standards • Produce gender responsive cards • Show teaching portfolio with reports from mentors/lead mentors showing progress towards meeting the teachers' standards

	Units	Topics:	Sub-topics (if any):	Teaching and Learning Activities (strategies) to achieve learning outcomes:
Course Content	**1**	**Preparation to Teach in School 3: Induction**	**a.** Orientation to **School (3)** culture, key education policies etc. by heads, lead mentors and mentors/supervisors Wider school life activities	• Audio visual/tactile analysis/Video observation e.g. archival materials used to sensitize student-teachers in **School 3** • Report on discussions by small groups (mentor and student-teachers review orientation events) • Use a checklist or take field notes (braille or tactile analysis) during observation in upper primary class and some expected events during their interactions.
			b. Wider school life activities	• Support patrons and actively participate in school clubs and co-curricular activities including: • Attend staff, PTA, SMC, CPD meetings and take notes • Participate in morning and closing assemblies and be part of play/lunch time activities (especially upper primarys student-teachers). [NTS. 1c; 1e] • Record incidents in SRJ and keep a professional teaching portfolio (e-portfolio)
	2	**Teach small groups with consistency**	Manage, motivate and extend learning of upper primary children taken into consideration diversity, equity and inclusivity	• Plan lessons for small group using differentiated approaches focusing on content knowledge [CK] and pedagogical content knowledge [PCK]) and pedagogical knowledge [PK], consider inclusivity, diversity and equity (NTS. 2c, 2f, 3a) • Use appropriate ICT/media tools to prepare and use TL resources with clear understanding of diverse learning needs of learners (NTS. 2f; 3j) • Teach lessons to small group (e.g. 4 upper primary children) using differentiated approaches and considering inclusivity, diversity and equity (NTS. 2f; 3f)

				• Assess upper primary children using differentiated approaches and mark the assessment task given based on objective criterion referencing (NTS. 3p) • Plan other out-of-class activities to consolidate and extend upper primary children's learning (field trips, excursions etc.) [NTS 2e]
	3	**Leadership**	Leadership qualities in the upper primary classroom and the wider school life.	• Set classroom rules and regulations agreed upon with learners and display on wall [NTS. 1c] • Support patrons and actively participate in school clubs and co-curricular activities including: 1. Attend staff, PTA, SMC, CPD meetings and take notes 2. Participate in morning and closing assemblies and be part of play/lunch time activities (especially upper primarys student-teachers). [NTS. 1c; 1e] 3. Reflect on your leadership qualities and record in SRJ
Course Assessment (Educative assessment: of, for and as learning	**Component 1: Evaluation of Small group teaching (by tutor and mentor) (NTS, 1d, 1e, 1f & 1g)** **Summary of Assessment Method:** Evaluation of teaching small groups which may include the following: Lesson plan and notes with understanding of BSC and differentiated approaches to teaching and learning Teaching and learning resources prepared to address diversity, motivate and extend learning Personal teaching philosophy statement Learner's marked exercises with comments from student-teacher Assessment records (comments from tutor/mentor/lead mentor) Weighting: 40 % This is assessment of learning and assessment for learning **Assesses Learning Outcomes:** Observe, teach (small group e.g. 4 children), motivate, manage and extend the learning of all children, with increasing consistency, whatever their socio-cultural, linguistic background and regardless of age, aptitude and ability. **[CLO 1]**			
	Component 2: PROFESSIONAL TEACHING PORTFOLIO/E-PORTFOLIO (NTS, 1d, 1e, & 1f) **Summary of Assessment Method**: Presentation and inspection of the items in the teaching portfolio; contents may include the following: Lessons planned and taught to small group using differentiated approaches, report on out-of-class			

	activities to consolidate and extend pupils' learning, Name of club or co-curricular activities participated in, Notes from staff meetings, PTA/CPD meetings (where applicable), photos, field notes, Personal teaching philosophy, SRJ etc. Weighting: 60 % This is assessment of learning and assessment as learning **Assesses Learning Outcomes:** Demonstrate emerging leadership qualities in the classroom and to contribute to wider school life, being guided by the legal and ethical codes of conduct required by the profession**. [CLOs: 2 & 3]**
Key instructional materials	• Videos/audio visual/tactile analysis of mentoring and coaching • Videos/audio visual/tactile of Classroom teaching & learning • Samples of classroom observation checklists (braille and written) • Samples of professional teaching portfolios • Samples of reflective log/SRJ • Samples of good/bad lesson plans • Samples of Staff/SMC/PTA meeting notes • Tutor professional development handbook • Samples of feedback instruments
Required Text (Core)	Cohen, L.; Manion, L. Morrison, K., & Wyse, D. (2010). *A Guide to Teaching Practice* (5th Ed.) New York: Routledge. McIntosh, P. (2010). *Action Research and Reflective Practice: Creative and visual methods to facilitate reflection and learning.* London Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). Pedagogy, curriculum, teaching practices and teacher education in developing countries. Education rigorous literature review. Department for International Development on: Routledge.www.teachersnetwork.org/tnli/research
Additional Reading List	Conn, K. (2014). *Identifying effective education interventions in Sub-Saharan Africa: A meta-analysis of rigorous impact evaluations* (Doctoral dissertation, Columbia University). Lane, K. L., Carter, E. W., Common, C., and Jordan, A. (2012). Teacher Expectations for Student Performance: Lessons Learned and Implications for Research and Practice, in Bryan G. Cook, Melody Tankersley, Timothy J. Landrum (Eds.) Classroom Behavior, Contexts, and Interventions (Advances in Learning and Behavioral Disabilities, Volume 25) Emerald Group Publishing Limited, pp. 95-129. Ormrod, J.E. (2014). Educational psychology: Developing learners. Pearson: Boston. The Sabre Charitable Trust (2017). *Assessment manual*. Accra: Conker House Publishing Ltd. Vavrus, F., & Bartlett, L. (2013). Testing and teaching. In: F. Vavrus & L. Bartlett (Eds.). *Teaching in tension: International pedagogies, national policies, and teachers' practices in Tanzania (93-114).* Rotterdam: Sense.

Year 3 Semester 2

Pedagogic Knowledge with ICT & Inclusion: SEN/Gender

CONTEXT

Primary school teachers are expected to exhibit a thorough knowledge of the primary school setting and the wider school environment to enable them reform and reinforce learning. This requires adequate skills in conducting action research. However, it has been observed that most primary school teachers need the skills in examining schools related problems that affects learning and understand the procedures for conducting an action research and implement interventions to support all primary school learners.

Course Title	**Inquiry and Action Research for Upper Primary**					
Course Code		**Course Level: 300**		**Credit value: 3**	**Semester 2**	
Pre-requisite	Inclusive School-Based Inquiry					
Course Delivery Modes	**Face-to-face: [√]**	**Practical activity: [√]**	**Work-Based Learning: [√]**	**Seminars: [√]**	**Independent Study: [√]**	**Practicum: [ ]**
Course Description (indicate NTS, NTECF, BSC GLE to be addressed)	The course seeks to provide the primary school student teacher with a sound knowledge, understanding and application of the principles and procedures in conducting Action Research. The course further seeks to assist student teachers to understand and use appropriate data collection procedures to obtain credible information, and the use of software tools to analyse data. Furthermore, student teachers will be exposed to issues that relate to Action Research and the role of the Action Researcher. The course aims at providing practical skills, including ICT tools, for student teachers to understand the benefits of Action Research as a developmental activity used to improve teaching and learning in primary schools with learners of diverse strengths and needs. The course will also expose student teachers to the various stages in writing Action Research report. This will help them to undertake action research project to improve the learning opportunities of an agreed group of primary school learners to promote greater inclusion which will help them to develop their teaching, classroom management and organisational strategies during supported teaching and also enable them add mini action research project reports to their portfolios. Differentiated interactive techniques (including pyramid and panel discussions, projects, audio-visual and tactile analysis, diamond nine, shower thoughts) and assessment procedures (reports, projects, case studies, digital/manual portfolios, individual and group presentations and projects) will be employed in the learning process. The course will also explore issues within the context of Ghanaian core values, critical thinking, honesty, commitment and passion, creativity and informed citizenry, digital literacy, and lifelong learning **(NTECF pp 38-45, NTS 3a, 3b, 3c, 3e, 3f, 3g, 3i)**.					

Course Learning Outcomes	On successful completion of the course, student teachers will be able to:	Indicators
	CLO 1. demonstrate knowledge and understanding of action research, its types, key principles, and the need for action research **(NTECF, NTS 3b, 3e, 3f, 3g).**	• Explain research, action research, and types of action research. • Describe action research as a disciplined inquiry, as reflective practice, and as bridging the gap between research and practice • Discuss the need for action research and the key principles of action research.
	CLO 2. demonstrate understanding of the processes involved in developing the background of the study, identifying and stating research problem and significance of the study **(NTECF, NTS 3b, 3e, 3f, 3g, 3i).**	• Identify the various components of the first chapter of a research report • Discuss the relationship among the background, problem identification, statement and significance of the study
	CLO 3. demonstrate knowledge and understanding of the types, sources of literature and how to appraise literature **(NTECF, NTS 3a, 3b, 3c, 3e, 3f, 3g, 3i)**.	• Identify the types and sources of relevant literature • Critique, appraise and reflective notes on an action research article reviewed
	CLO 4. demonstrate knowledge and application of action research design, sampling techniques, data collection and analysis procedures	• Apply the procedures in sampling, data collection when conducting mini action research during supported teaching in school • Analyse data on primary school learners using appropriate softwares during supported teaching in schools
	CLO 5. demonstrate understanding and application of procedures for writing action research project **(NTECF, NTS 3b, 3e, 3f, 3g, 3i)**.	• Develop individual proposal on an identified problem during observation while on support teaching in schools • 4.2 Conduct and apply the procedures for writing a group mini action research project during supported teaching in schools
	CLO 6. demonstrate knowledge, understanding and application of critical issues in action research **(NTECF, NTS 3b, 3e, 3f, 3g, 3i, 3j, 3l)**.	• Discuss the critical issues to be considered in conducting action research. • 5.2 Apply the critical issues in conducting mini action research

	Units	Topics:	Sub-topics (if any):	Teaching and Learning Activities to Achieve Learning Outcomes:
	1	Definition and characteristics of action research	Meaning of research and types of action research; Action Research as reflective practice; Action Research as bridging the gap between research and practice; The need for action research; Key principles of Action Research	Tutor-led discussions on research, action research, and types of action research; individual and group power point presentations on action research as a disciplined inquiry, reflective practice, bridging the gap between research and practice, and the need for action research; Shower thoughts on key principles of action research.
	2	Process one in conducting action research	Background of the study; perceived Problem and statement of the problem; purpose and objective of the research; research questions; significance of the study; delimitation of the study; operational definition of terms; organization of the study	Concept mapping/cartooning on identification and diagnosing of problem and purposes; group discussion on significance, delimitation and organization of the study
	3	Process two in conducting action research	Meaning of Reviewing related literature; empirical and theoretical review; sources of literature; appraisal of literature	Use concept mapping and models to initiate discussion on types and sources of literature; discuss the relevance of appraising literature.
	4	Process three in conducting action research	Methodology: research design; description of study setting; population, sample and sampling technique; planning and implementing interventions activities; problems encountered; data collection instruments; types of data collected; data analysis plan	Use models and mapping to illustrate and initiate discussion on aspects of methodology; use case studies to explain population and sampling; group discussion on strength and weakness of types of instrument

	5	Process four in conducting action research	Data presentation, analysis and discussion: Approaches to data analysis (quantitative and qualitative); Steps for analysing data; software tools for quantitative and qualitative analysis; interpretation and discussion	Mapping the data collection, presentation and analysis process; demonstrate use of appropriate software in analysing and interpreting data
	6	Process five in conducting action research	Summary of findings, conclusions, limitations and recommendations; area for further research	Use case studies and mapping to initiate discussion on the relationship among finding, conclusions and recommnedations
	7	Critical issues in action research	Role of the action researcher; Ethical considerations; Strengths and limitations of action research; Practical and theoretical matters of action research; referencing (APA)	Think-pair-share on the role of the action researcher; Individual/group presentations and reflective notes on ethics to be considered when conducting action research; Shower thought on practical and theoretical matters of action research; group power point presentations on things to remember in action research
	Component 1: Formative assessment (Quiz) Summary of Assessment Method: Quiz on definition and characteristics of action research, population and sampling procedure; data collection and analysis procedure Weighting: 30% Assesses Learning Outcomes: CLO 1, CLO 3 CLO 4			
	Component 2: Formative assessment (individual and group projects) Summary of Assessment Method: individual project on research proposal on an identified problem during supported teaching in schools(proposal should be part of portfolio) Weighting: 30% Assesses Learning Outcomes: CLO 2, CLO3, CLO 4, CLO 5			

	Component 3: Summative assessment (End of semester project) Summary of Assessment Method: End of semester mixed Group mini action research projects report (report should be part of portfolio) Weighting: 40% Assesses Learning Outcomes: CLO 2, CLO 3, CLO 4, CLO 5 and CLO 6.
Teaching and Learning Resources	1. NVIVO 2. ATLAS Ti 3. SPSS 4. TESSA Online Educational Resources (www.tessafrica.net) 5. T-TEL Modules (www.t-tel.org). 6. Other Relevant Online Resources (www.Tess-india.net, www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan academy) 7. The iBox (CENDLOS) **8.** YouTube
Required Text (Core)	Ackummey, M. A. &Kankam, G. (n.d.). *Educational action research*. Winneba: Centre for Teacher Development and Action Research. Dampson, D. G., & Mensah, D. K. D. (2014). *A practical guide to action and case study research.* Kumasi: Payless Publication Ltd. Kankam, G. &Weiler, J. (2010). *A guide to action research for colleges of education and universities*. Accra: Readwide Publishers.
Additional Reading List	Cohen, L., Manion, L., & Morrison, K. (2011).*Research methods in education (7th ed.)*. New York: Routledge. Collins, J. (2004). Education techniques for life-long learning. *Radiographics, 24,* 1484-1489. Fraenkel, J. R., &Wallen, N. E. (2009). *How to design and evaluate research in education*. New York: McGraw-Hill. Mugenda, O. M., &Mugenda, A. G. (2009). *Research methods: Quantitative and qualitative approaches*, Nairobi: Acts Press. Norton, L. S. (2009). *Action research in teaching and learning: A practical guide to conducting pedagogical research in universities*. London: Routledge. Somekh, B. (2006). *Action research: A methodology for change and development*. London: Open University Press. Tomal, D. R. (2010). *Action research for educators*. New York: Rowman and Littlefield Education.

Language and Literacy[9]

CONTEXT

Literacy across the curriculum is a course developed against the background that literacy cuts across all disciplines and that every teacher is a teacher of literacy. Literacy has to be a shared responsibility throughout the entire school. Literacy (speaking and listening, reading and writing) is the main mode of communication used in school for teaching and learning, and for developing thinking in all disciplines. Literacy supports learning; learners need to understand the vocabulary, expression and organizational structures of a subject in order to conceptualize that subject and cope with its cognitive demands. Responding to higher order questions encourages the development of thinking skills and use of effective literacy skills. In the learning process, we make and revise meaning through language. There is the tendency however, for this all important element of learning to be de-emphasized in schools. There is also a general notion that literacy development among learners is the sole responsibility of the language teacher.

For this reason, training is being strengthened to incorporate literacy into all subject areas. This will help learners read text effectively, produce their own versions and confidently participate in discussion. In order to improve learning outcome of all learners at the Upper Primary level, teachers must be equipped with adequate subject knowledge and pedagogic practice to incorporate literacy in their disciplines.

Course Title	**Literacy: Literacy across the Curriculum**						
Course Code		**Course Level: Level 300**	**Credit value: 3**		**Semester 2**		
Pre-requisite	Teaching Reading and Writing						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activities** ☒	**Work-Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**E-Learning Opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	The course aims to equip teachers with the skill to incorporate subject specific literacy in their disciplines to enhance students' academic success. The course introduces student teachers to the concept literacy across the curriculum, the importance of cross-curricula literacy, principles and practice of cross-curricular literacy and planning for cross-curricular literacy. Additionally, the course exposes student teachers to ways they can apply literacy skills in teaching their subject areas. The course also aims at assisting student teachers to know how to integrate subject specific literacy into planning, teaching and assessing across the Upper Primary curriculum and teaching strategies to use to improve literacy across the curriculum. The course equips learners with listening, speaking, writing and reading strategies that can be used to improve literacy across the curriculum. In this course, students are also						

[9] For Language & Literacy at this level, students will take both the English Language and Ghanaian Language course for 3 credits. Lessons for the semester will be split between the two language courses

<table>
<tr><td></td><td colspan="2">introduced to how to develop assessment and make use of literacy explicit in the various disciplines in the Upper Primary. The course also emphasises planning appropriate lessons taking into consideration all manner of learners, their needs and interests. Student-teachers are also given opportunity to visit school to acquaint themselves with how literacy is used across the curriculum in the Upper Primary, especially in their subject area. Student teachers will also have the opportunity to teach their subject area using the appropriate literacy demands. The course will be delivered through student-centred approaches like discussion, brainstorming, project work/seminars, think-pair-share, class presentation by students, role-play, school visits/field work, concept mapping, teacher modelling and practical teaching. The assessment modes - for, of, and as - for this course include quizzes, assignments, examinations, presentations, report writing, portfolios and observations. The course is aimed at achieving the following: NTS 2b, 3 b, e, f, l, j, m and NTECF bullets 7, 8 (p. 25), bullet 6 (p. 25) and requirements.</td></tr>
<tr><td rowspan="4">Course Learning Outcomes</td><td colspan="2"></td></tr>
<tr><td>Learning Outcomes
On successful completion of the course, student teachers will be able to:</td><td>Indicators</td></tr>
<tr><td>1. Demonstrate knowledge and understanding of the concept and importance of literacy across the Upper Primary curriculum, principles and practice and planning for cross-curricula literacy and misconceptions about literacy across the curriculum (NTS 2b, 3i, m)</td><td>• Define with examples the concept of literacy across the curriculum
• Identify the importance of cross-curricula literacy in academic success
• Identify the principles and practice of literacy across the curriculum
• Identify subject specific literacy in the Upper Primary curriculum at word, sentence and text levels.
• Identify misconceptions of literacy across the curriculum and how to address them.</td></tr>
<tr><td>2. Demonstrate knowledge and understanding of ways to apply literacy across the curriculum (NTS 2b, NTECF bullet 7 (p. 25))</td><td>• Identify ways of applying literacy across the curriculum
• Discuss the challenges of implementing literacy across the curriculum
• Examine ways the challenges to implementing literacy across the curriculum can be addressed</td></tr>
<tr><td>3. Integrate subject specific literacy into (listening, speaking, reading and writing) into planning, teaching and assessing across the UPPER PRIMARY curriculum and strategies to improve literacy across the curriculum (NTS 2b, NTECF bullet 7 (p. 25))</td><td>• Use listening and speaking to engage with others in groups and class discussions, learn collaboratively and explain their writing in their subject areas.
• Use reading to locate information, ensure meaning securely, summarise content and ideas, establish familiarity with technical and specialised vocabulary, synthesise and adapt materials read and make notes in a specific discipline
• Use writing to select materials, organise writing in coherent and logical form, use technical and specialised vocabulary and language patterns in the subject area.</td></tr>
</table>

	4. Demonstrate knowledge and understanding of how to use appropriate language register in their subject specific areas (NTS 2b)	• Use appropriate language register for their disciplines related activities • 4.2 Develop appropriate language register in their subject area and indicate the importance of using subject specific register in their writing or speech.
	5. Interpret the Upper Primary curriculum to find out how literacy is integrated across the curriculum and plan a lesson to teach with colleagues to demonstrate their understanding of literacy across the curriculum. (NTS 3b, e, f, j and NTECF bullet 8 (p. 25), bullet 6 (p. 26))	• Examine the Upper Primary curriculum to find out how literacy is integrated into the various disciplines. • Design a lesson plan to indicate how literacy cuts across the Upper Primary curriculum and teach with it bearing in mind learners' with diverse needs.

Course Content	**Units**	**Topics**	**Sub-Topics**	**Suggested Teaching And Learning Activities To Achieve Learning Outcomes**
	1	**The concept and importance of Literacy across the curriculum**	1.1 Definition and examples of literacy across the curriculum 1.2 Importance of literacy across the curriculum 1.3 Principles and practice of literacy across the Upper Primary curriculum including ways of assessment 1.4 Cross-curricula literacy in teaching and learning of other disciplines	1. Group work (Student teachers work in groups to discuss the introduction – Reinforce the definition of literacy. In working groups, students to brainstorm a range of literacy skills in a spidergram - choose one curriculum area and indicate which of the skills can be used for that curriculum area. Group will get feedback through presentation) 2. Class discussion: (Teacher leads student teacher to identify and evaluate the importance of various literacy skills in Upper Primary used in the following: -In the Trainee Teacher group sessions. -By observing the mentor teacher during a school visit) 3. Teacher led discussion on principles that will guide the practice and planning of cross- curricular literacy, eg. *Subject- knowledge, assessment etc*. Discuss and record various ways of assessing cross curricular literacy. What are the potential misconceptions of literacy across the curriculum?

			1.5 Misconception of literacy across the curriculum	4. Group Work (As a group, critically look at a given lesson plan or a video with embedded literacy skills. Discuss and evaluate the lesson plan/video, considering the literacy skills taught and strategies used to cater for inclusion, equal access and diversity. Record in SRJ. Agree on a checklist (criteria) for an effective lesson plan). 5. Problem-solving (Student teachers are put in croups to find out the misconception of literacy across the curriculum and how to address the misconceptions
	2.	Using appropriate language register/vocabulary in subject area	2.1 Use of appropriate language register in the various disciplines.	1. Class discussion (Teacher leads student teachers in a discussion to define the term 'language register'. Identify the appropriate language register for a range of Upper Primary curriculum areas. 2. Group work (student teachers are put in groups based on their subject specialism and tasked with writing appropriate vocabulary/register to use on selected topics in their discipline. The words are then put in a chart/poster and displayed in the classroom to share with others).
	3.	Applying literacy across the curriculum	3.1 Ways of applying literacy across the curriculum ***(Action research)***	1. School visits (student teachers visit schools to observe the various strategies used in applying a range of literacy skills in a curriculum area and how the skill is assessed and identify the strengths, challenges and barriers to learning (eg. gaps in learning) and how they are addressed).
	4.	Integrating literacy across the Upper Primary curriculum	4.1 Ways of integrating literacy across the disciplines in the Upper Primary curriculum	1. Practical Work (student teachers use the strategies of integrating subject- specific literacy observed in previous sessions, choose a curriculum area and draft a lesson plan). 2. Peer-Review - Use agreed checklist to assess lesson plan for its effectiveness.

	5.	Identifying Literacy across the Upper Primary curriculum	5.1 Interpreting the Upper Primary curriculum in relation to literacy across the curriculum 5.2 Designing a lessons plan for literacy across the curriculum 5.3 Co-teaching literacy across the curriculum with lesson plan designed	1. Group work – (student teachers work in groups to examine the Upper Primary curriculum to find out how literacy is integrated into the various disciplines and provide feedback. Record reflections in SRJs. 2. Use knowledge of the Upper Primary curriculum to refine and improve lesson plan. Discuss and amend with co-teacher/mentor. 3. Practical work (Co-teaching – Student may take on main role in delivery (introduction, questioning, modelling etc). 4. Reflect and evaluate outcome with mentor teacher and record in SRJ.
Course Assessment (**Educative assessment of, for, and as learning)**	**Component 1:** Assessment of learning (summative assessment) Summary of Assessment Method: 2 short diagnostic quizzes and 1final exam on the concept of curriculum across disciplines, importance of literacy across the curriculum, misconceptions, applying literacy across the curriculum, challenges of implementing literacy across the curriculum, and use of appropriate subject specific literacy *(Core skills targeted are communication, collaboration, inclusivity, team work, creativity, and digital literacy)* Weighting: 40% Assesses Learning Outcomes: Learning outcomes measured 1-4.			
	Component 2: Assessment for and as learning (formative) Summary of Assessment Method: 2 Group presentations, 1individual presentations and class participation *(Core skills targeted are communication, team work, creativity, digital literacy)* Weighting: 30 % Assesses Learning Outcomes: Learning outcomes measured are 1- 4.			
	Component 3: Assessment of learning Summary of Assessment Method: 1 school visit/co-teaching and 1 report writing on how literacy is used to cut across the UPPER PRIMARY curriculum*(Core skills targeted are communication, collaborations, inclusivity, and creativity)* Weighting: 30 % Assesses Learning Outcomes: Learning outcomes measured are 5			

Instructional Resources	• Computer • Projector • Videos • Online resources of teaching across the curriculum
Required Text (Core)	Antonacci, P. A., O'Callaghan, C. M. & Berkowitz, E. (2014). *Developing Content Area Literacy: 40 Strategies for Middle and Secondary Classrooms (Volume 2) (Second Edition*) CA: SAGE Publications Jacobs, H. H (2006). *Active literacy across the curriculum: Strategies for reading, writing, speaking, and listening (1st ed.)*. NY: Routledge.
Additional Reading List	Behrens, L, M. & Roseh, L. J. (2011). *Writing and Reading Across the Curriculum (11th ed.).* New York: Longman. Behrens, L, M. (2017). *Writing and reading across the curriculum (12th ed.).* New York: Longman. Sreb, S. (2003). *Literacy across the curriculum: Setting and implementing goals for literacy programs for grades 6 through 12*. Southern Regional Education Board.

English

CONTEXT

English is a second language to Ghanaian children and for that matter, teachers should be properly trained to manage and organise the classroom environment to maximize learning. Student teachers must possess the needed skill to organize their language classrooms in such a way that children can take risks and improve their English language proficiency. However, teachers are not adequately prepared to facilitate all these important skills in their learners. This course is, therefore, designed to equip student teachers with such skills to be able to manage less resource/deficient language classrooms for effective delivery and assessment.

Course Title	**English Language Classroom Organisation, Management and Assessment**						
Course Code		**Course Level:**	300	**Credit value:**	**3**	**Semester**	2
Pre-requisite							
Course Delivery Modes	**Face-to-face** ✓	**Practical Activity** ✓	**Work-based study**	**Seminar**	**Independent Study** ✓	**e-learning opportunities**	**Practicum**
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	This course is in two parts; classroom management and organization and classroom assessment. The first part of the course examines classroom-management models as well as theoretical and empirical approaches to classroom management and their application to best practices of English language classroom organization and management. The course helps student teachers develop appropriate English language classroom management skills including decision-making and problem-solving. The course also presents the concept of motivation in language learning. In this course, student teachers will focus on implementing interventions for preventing and managing routine and disruptive discipline problems in a practical manner to include establishing effective classroom rules and procedures, relationships, role of parents, and helping student teachers contribute to a positive learning environment (NTECF p. 20). Emphasis is placed on contextualising management strategies within a variety of curriculum contexts and STS: Developing Teaching practices that cater for diversity within classrooms. The second part of the course prepares teachers to utilize assessment to inform English language classroom instruction. The content emphasises theoretical						

	and practical study of instruments and procedures for assessing culturally and linguistically diverse students. Student teachers will design and utilize standardised (formal) and instructional (informal) methods of evaluation to assess students' social, emotional, cultural, linguistic, and academic development and achievement, including critical analyses of existing assessment tools for validity, reliability, and bias. Additionally, they will be able to utilize assessment to distinguish between levels of language proficiency in making decision of educational placement, as well as differentiate between student learning challenges due to exceptionality and second language acquisition. Discussions, group work, observational experiences and simulation will be the delivery approaches for the course. The course will be assessed through assignments, group work and case studies. The course is aimed at fulfilling the following NTS and NTECF requirements: NTS 1d, 1f:12; 2c, 2e:13; 3c, 3d, 3f, and k-p; NTECF pp. 14, 22, and 39.	
Course Learning Outcomes	On successful completion of the course, student teachers should be able to	
	Learning Outcomes	**Indicators**
	1. Demonstrate knowledge of planning classroom organization and management by illustrating optimum use of instructional resources (computers, books, writing materials, reference material, manipulatives, creative constructive materials, etc.) that facilitate efficiency and effectiveness of access, use, maintenance, and storage of such resources (NTS 1c:12, NTS 2e, 2f:13).	1.1. Explain the concept of planning classroom organization and management. 1.2. Describe a scenario of a classroom organization. 1.3 Determine how the classroom organisation may lead to efficiency and effectiveness.
	2. Design the organization of the physical aspects of a classroom (furniture, areas, etc.) for ease of transition, use, safety and traffic flow based on effective designs presented in the literature and also establish classroom procedures and expectations (rules) to promote a positive, effective and efficient learning environment (NTS 3c)	2.1. Organise the physical aspects of a classroom for effective language learning. 2.2. Make inferences about the rationale behind the organization of the physical aspects of a classroom. 2.3. Establish classroom procedures and expectations that will positively affect the learning environment.

	3. Student teachers will be able to demonstrate knowledge and skill of affective domain-based theoretical models for (1) setting and managing the emotional tone of a classroom, (2) managing the psycho-social atmosphere of the classroom and individual students, and (3) managing motivation of students to succeed in learning academic content, social skills, self-responsibility skills, and inter-relationship skills with other class members (**NTS 1d, 1e, 2c, 3c: 12, 13, 14**)	3.1 Discuss the strategies of integrating theoretical concepts into English language classroom/instructional practices. 3.2 brainstorm the psychosocial behaviour of individuals in the English language classroom 3.3 discuss the motivating factors that help students to succeed in English language classroom.
	4. Analyze a given classroom situation for legal, ethical and professional issues and concerns, by applying legal, ethical, and professional reactions to the situation and provide resolutions to align the classroom legally, ethically, and professionally. This will include all legal bases including students with disabilities (**NTS 1d, 2a: 12, 13**)	4.1 Identify policies of legal issues of the educational system in Ghana. 4.2 discuss the implications of legal and ethical policies to the organisation and management of English language classroom 4.3 discuss the implication of professional issues to the organisation and management of English language classroom.
	5. Observe, analyze and document student behavior to match an appropriate intervention strategy to change behavior in a desired direction (**NTS, 1c, 1f: 12**)	5.1 Discuss student behaviours regarding organization and management of English language classroom and how to address them. 5.2 Match appropriate intervention strategies to desired or intended behaviours.
	6. Demonstrate knowledge of student-centred language classroom environment and determine the principles that make English language teaching interesting and motivating (**NTS 2c: 13**)	6.1 Identify the features of student-centred language classroom environment. 6.2 Discuss the implications of the features of student-centred language classroom for teaching and learning English. 6.3. Discuss ways that they can employ to make English language teaching and learning interesting and motivating

	7. Demonstrate knowledge of types and modes of assessment and their effects on teaching and learning (**NTS 3k, 3l: 14**)			7.1. Identify the various strategies for assessing learners proficiency in English language 7.2 Identify the problems associated with such strategies and how to overcome such problems
Course Content	**Units**	**Topics:**	**Sub-topics**	**Teaching and learning activities to achieve learning outcomes**
CLASSROOM ORGANISATION AND MANAGEMENT	1	Foundations of Classroom Organisation and Management .	• Explanation of the concept of classroom organization and management. • Types of classroom orgnaisation and management. • Sequencing of activities in the classroom.	• **Discussion**: Discuss with student teachers the concept of planning and preparing classroom organization and management • **Discussion**: Discuss with students the types of classroom organization and the sequencing of activities in the classroom. • **Brainstorming**: Using brainstorming, student teachers come out with preventive and reactive classroom organisation and management strategies, management of content (space, materials, equipemnt, movement, etc.) and covenant (e.g. social dynamics and interpersonal relationships)
	2	Classroom organisation and management as discipline	• The role of the language classroom teacher • Strategies for discipline in the language classroom	• **Discussion**: Discuss the importance of the English language teacher as a role model of discipline. • **Discussion**: Discuss the strategies that make the language classroom organization and management as discipline.

	3	Creating a student centred language environment and making English language teaching interesting and motivating	• What is student-centred language environgment? • Motivating English language teaching	• **Brainstorming**: Using brainstorming techniques, student teachers describe student-centred language environment and identify the steps involved in creating the environment. • **Discussion**: Discuss with student-teachers intrinsic and extrinsic motivating factors for English language teaching.
	4	Analysis of classroom situations for law abiding issues taking into consideration equity and inclusivity.	• Legal issues of classroom organisation and management • Ethical issues of classroom organisation and management • Professional issues of classroom organisation and management	• **Presentation**: Student teachers, in groups, make presentations on legal, ethical and professional policies on teaching and learning. • **Discussion**: Discuss with student-teachers the implications of the legal, ethical and professional issues to classroom organisation and management considering equity and inclusivity.
	5	Observation and analysis of student behaviour and expectations	• Students' peculiar behaviours • Expectations and interventions of student behaviour	• **Discussion**: Discuss with student teachers the unique behaviours students usually exhibit in class. • **Group presentation**: Student teachers, in groups, make presentation on intervention strategies to address unacceptable behaviours in class. • **Discussion**: Discuss student behavior to match an appropriate intervention strategy to change behavior in a desired direction.

	6	Aims, types, modes and aspects of assessment	• Aims of assessment • Types of assessment • Modes of assessment • Aspects of assessment • Problems of assessment	• Discussion: Student teachers discuss the aims of assessment (e.g. diagnosis of teaching and learning, grading of students, selection of students, …). • **Group presentation**: Student teachers, in groups, make presentations on types of assessment • **Discussion**: Discuss with student teachers the various modes of assessment • Brainstorming: Student teachers brainstorm and come out with the aspects of assessment (e.g. formative, summative, criterion, norm, …). • Discussion: Teacher leads student to discuss the problems of assessment and how to solve the problems through leading and probing questions
	7	Assessment and teaching and learning	• Advantages and disadvantages of assessment and their Impact on teaching and learning	• **Discussion**: Student teachers discuss the advantages of assessment in English language teaching and learning. • **Independent search and discussion**: Task students to search for information on the internet on the disadvantages of assessment in English language English language teaching and learning. • **Discussion**: Student teachers discuss the impact of assessment on teaching and learning of English language.

Course Assessment	**COMPONENT 1** Assessment of learning (summative assessment) A written examination to assess student teachers' subject and pedagogic knowledge in classroom organization, management and assessment Assess learning outcomes (CLO 1 – 7) Weighting: [30%] **COMPONENT 2: COURSEWORK :** Assessment for and as learning (formative) Summary of Assessment Method: 2 Group presentations, 1individual presentations (Core skills targeted are organizational strategies, management strategies and assessment) Assess learning outcomes (CLO 4, 5, 7) Weighting: 30 % **COMPONENT 3** Individual assignment – Student teachers to write on classroom organisatioal strategies, management strategies and assessment (Core skills: communication, critical thinking, creativity, digital literacy) Assess learning outcomes (CLO 1, 2, 3) Weighting: 40%
Instructional Resource	1. Managing the foreign language classroom - Iowa Research Online 2. Videos on language classroom organisation
Required Readings	Owu-Ewie, C. (2018). *Introduction to language teaching: A resource for language teaching* (Re- vised). Accra: Sam-Woode Ltd. Rodgers, B. (2015). *Classroom behavior: A practical guide to effective teaching, behavior management and colleague support*. London: Sage Publications Ltd.
Reading Lists	Hall, J. K. (2001). *Methods for teaching foreign languages: Creating a community of learners in the classroom 1st Edition.* New York: Pearson. Young, D. J. (1998). *Affect in foreign language and second language learning: a practical guide to creating a low-anxiety classroom atmosphere*. NY: McGraw-Hill Education. Groves, E. Snr. (2009). *The everything classroom management book: A teacher's guide to an organized, productive, and calm classroom*. New York : F+W Media.

	Wong, K. K., Wong, R. T., Jondahl, S. F., & Ferguson, O. F. (2014). *The Classroom Management Book*. Mountain View, California: Harry K. Wong Publications.

Mathematics /Numeracy

CONTEXT

Learning Mathematics results in more than a mastery of basic skills. It equips students with a concise and powerful means of communication. Curriculum Studies in Mathematics outlines practical mathematical structures, operations, processes, and language provide students with a framework and tools for reasoning, justifying conclusions, and expressing ideas clearly. Through mathematical activities that are practical and relevant to their lives, students develop mathematical understanding, problem-solving skills, and related technological skills that they can apply in their daily lives and, eventually in the classrooms as practitioners. Mathematics is a powerful learning tool that helps students to identify relationships between mathematical concepts and everyday situations and make connections between mathematics and other subjects, they develop the ability to use mathematics to extend and apply their knowledge in other curriculum areas, including science, music, and language.

This curriculum recognizes the diversity that exists among students who study mathematics. It is based on the belief that all students can learn mathematics and deserve the opportunity to do so. It recognizes that all students do not necessarily learn mathematics in the same way, using the same resources, and within the same time frames.

Curriculum knowledge will go a long way to support equity by promoting the active participation of all students and by clearly identifying the knowledge and skills student teachers are expected to demonstrate in every grade. It recognizes different learning styles and sets expectations that call for the use of a variety of instructional and assessment tools and strategies in the teaching and learning of Mathematics. It aims to challenge all students by including expectations that require them to use higher-order thinking skills and to make connections between related mathematical concepts and between mathematics, other disciplines, and the real world

Course Title:	**Teaching and Assessing Upper Primary Mathematics (Advanced)**						
	Code:	**Course Level:300**	**Credit Value: 3**			**Semester 2**	
Course Delivery Modes *(Please, double click and check)*	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminar** ☒	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum**
Pre-requisite	**Teaching and Assessing Upper Primary Mathematics 2**						
Course Description	In this course, student teachers will develop further understanding of the content and scope as well as methods of teaching the Ghanaian Curriculum for Change and Sustainable Development: Numeracy Standards for P4-P6. They will use the knowledge of theories in upper primary learning and teaching of mathematics to enable them to conceptualise, plan and design learning, teaching and assessments. There is the need to do auditing of subject knowledge to establish and address student teachers' learning needs, perceptions and misconceptions in of topics within the upper primary mathematics curriculum. They will consider a range of strategies including play-based and inquiry learning as well as interpret student thinking and diagnose misconceptions to improve student learning. They will also explore the linkages with literacy, numeracy and ICT and develop their pedagogical content knowledge in upper primary numeracy teaching. The courses focus on lesson design and analysis, including the development of micro lesson plans and tasks for new concept development, practice, review and trialling these in micro-teaching sessions. It will be relevant during STS placement as well as engagement in action research to improve student learning within a community of practice. A combination of face-to-face sessions, practical activities, work base, independent study, seminars and e-learning opportunities will be used to deliver the course. Differentiated approach to teaching will be used to ensure that student teachers will be supported in the Teaching and Assessment of Upper Primary Mathematics. The instructional strategies will pay attention to all learners, especially girls and students with Special Education Needs. The course will be assessed using a variety of assessments methods including coursework, assignments, quizzes, project works with presentation and end of semester examination to provide a comprehensive outlook of student teachers competencies, values and skills. (NTECF, p. 21, 45; NTS 1a, 2c, 2e)						

Course Learning Outcomes (CLOs) with indicators	Outcomes	Indicators
	On successful completion of the course, student-teachers will be able to: **1.** Demonstrate a comprehensive knowledge and understanding of the official P4 - P6 mathematics curriculum within key mathematical concepts in the Number, Algebra, Geometry and Handling Data content domains in the basic school mathematics curriculum (NTS, 2c)	• Develop understanding of the scope and content of the official P4 - P6 mathematics curriculum and the guidelines for assessing mathematics at this level • Use mental strategies in carrying out fluently the four basic operations on numbers • Select and using the most appropriate mathematical method(s) or heuristics in carrying out tasks/exercises/problems in Number Geometry and Handling data within the basic education mathematics curriculum. • Make connections between mathematical concepts within the Number, Algebra, Geometry and Handling data content domains and applying them to design lessons and to teach at the appropriate level. • Identify and resolving mathematics related learning difficulties within Number, Algebra, Geometry and Handling data content domains. • Reflect on and clarifying initial thinking about mathematical ideas and situations to support children's learning.
	2. Use manipulatives and other TLMs including ICT in a variety of ways in learning mathematics concepts in Number, Algebra, Geometry and Handling data(NTS, 3j);	• Use manipulatives and other TLMs in developing the mathematics concepts. • Use ICT as a tool in developing the mathematics concepts. • Use drawing tools to conduct geometrical investigations emphasising visualization, pattern recognitions, conjecturing, etc. • Identify a variety of manipulatives and ICT tools for teaching important mathematical concepts such as measurements, shape and space, etc.
	3. Begin to develop skills for diagnosis and remediation, assessment resources/records, and monitoring progress, (NTS, 3j);	• Engage in designing tools to diagnose misconceptions and designing/implementing remediation • Identify resources/records that should be for effective classroom assessment in specialism - including examples of standardised tests (NEA), teacher made tests, record sheets, cumulative records forms, report forms, etc., • Study and complete student's cumulative record form • Analyse learners' performance (or assessment data) to provide feedback to stakeholders

	4. Value as well as respect equity and inclusivity in the mathematics classroom (NTS, 1e; NTECF, p.38)	• Demonstrate awareness of own self and of students as unique individuals in the teaching and learning of mathematics. • Appreciate the contributions of, and supports, colleagues in the mathematics classroom in other to promote and sustain equity and inclusivity. • Cooperate with colleagues in carrying out mathematics tasks in in variety of ways. • Engage in reflective thinking about how mathematics was taught in student-teacher's basic school days. • Use reflective strategies to plan, implement, test, revise, and confirm the reasoning and to share these with colleagues.
	5. Demonstrate awareness of socio-cultural issues in teaching and learning mathematics in the content domains of Geometry and Handling data (NTS, 2c).	• Reflect on and showing how student teachers' previous mathematics performance influences their views of mathematics and its learning. • Accommodate the needs of students from diverse cultural backgrounds, as well as employing instructional strategies appropriate for mixed ability, multi-lingual and multi-aged classes.

Course content	**Unit**	**Topics**	**Subtopics**	**Teaching and learning activities to achieve learning outcomes**
	1	Place value on 10,000,000 and numeration systems	Place value in numeration systems - base 2 and five	Demonstrating place value using base ten structured materials i.e. 100s, 10s and 1s, (bundled/loose sticks; a flat, long, and unit lego-blocks; flat, strip and loose square cut-outs; etc. using both English and a Ghanaian language; Representing and counting numbers (10 to 10,000,000) using multiple of base ten structured materials (in both English and a Ghanaian language) Discuss numeration systems in ancient cultures and in some Ghanaian cultures Use manipulatives and/or technology represent and write numbers in other bases particularly – base 2 and five.
	2	The four basic operations on number and Number facts within 99	The four basic operations on numbers within 99; and the within 999	Discussions and peer presentations on the four basic operations on numbers within 99; and then within 999 Demonstrating the use of mental strategies in carrying out the four basic operations on numbers

				Developing and playing math games based for consolidating number facts Use manipulatives and/or technology to use the basic operations to represent numbers and statements in a multiple of ways
	3	Fractions, decimal fractions and percentages including ratio and proportion	Fractions: meaning of fractions, Relationship between common fractions, Decimals and percentages; Basic operations, PEDMAS; Mental strategies for multiplying and dividing by special fractions $\frac{1}{2}s$,$\frac{1}{5}s$, $\frac{1}{10}s$, $\frac{1}{100}s$, $\frac{1}{1000}s$, etc., Problem solving	Using manipulatives to demonstrate meaning of fractions as (i) equal part(s) of a whole, and as (ii) equal part(s) of a a group of given objects Using manipulatives, number line and fraction chat to demonstrate the concept of equal (or equivalent) fractions, operation on fractions Using manipulatives, number line and fraction chat to demonstrate the relationship between common fractions, decimals and percentages; Demonstrating of mental strategies for carrying out basic operations (including the use of the BODMAS rule) as well as multiplying and dividing by special fractions $\frac{1}{2}s$, $\frac{1}{10}s$, $\frac{1}{100}s$, $\frac{1}{1000}s$, etc., Engaging in micro lesson design on problem solving involving fractions, teaching with peers and doing critics
	4	Diagnosis and remediation; assessment resources/records, and monitoring progress	Misconception diagnosis, Classroom assessment resources and records Interpreting data/reports on performance and providing feedback Evaluating performance and monitoring Progress,	Designing tools to diagnose misconceptions and designing/ implementing remediation Identification of resources that should be available in the classroom for effective assessment in specialism - including examples of standardised tests (NEA), teacher made tests, record sheets, cumulative records forms, report forms, etc., Studying and completing student's cumulative record form Analysing learners' performance (or assessment data) to provide feedback to stakeholders – students, colleagues and parents, PTA and role playing a School Performance Appraisal Meeting (SPAM)

	5	Micro Lessons and use of technology across upper primary numeracy	Importance of lesson planning Micro lesson planning formats Design of micro lessons Engagement in micro teaching with peers Exploration of technology use primary mathematics.	Verbal exposition and discussions on importance of lesson planning, micro lesson planning formats and technology use in teaching numeracy in the across upper primary Reading teaching scenarios (and/or watching video clips} on teaching numeracy in the upper primary and doing a critic based on using mathematical learning theory and knowledge of curriculum content, pedagogy and resources to critique a mathematics lesson Engaging in micro lesson design, teaching with peers and doing critics Observing and reflecting upon how mathematics lessons are currently taught in schools
	6	Shape and Space:	Informal geometry and spatial sense; Nets of 3d shapes; Shapes and their properties; Hand sketching of common solids; Relationship among faces, edges And Vertices;	Through interactive and collaborative group work, student-teachers explore 2D shapes and their properties; Construct 3D shapes from the nets; Investigate the properties of 2D and 3D shapes – congruencies, similarities, diagonals, parallel, symmetries, etc. Using ICT tools and other manipulatives to investigate properties of 2D and 3D shapes;
	7	Measurement	Concept of measurement; Using non-standard and standard units of measurement; Angles Perimeter and areas of triangles Circumference and area of circular regions; Surface area and volumes of prisms and pyramids; .	Explore how student-teachers perceive children's understanding of the concept of measurement; Using manipulatives and other TLMs through mathematical discourse identify referent non-standard units for measuring length, mass and capacity Demonstrating the with cut-out shapes and supported with video clip the process of deriving the formula for π, circumference and area of a Demonstrating strategies for finding the surface area and volumes of prisms and pyramids.

	8	Handling Data	Collecting, interpreting and presenting data Ideas of chance and uncertainty	Verbal exposition, student-teacher presentations on collecting, interpreting and presenting data, and ideas of chance and uncertainty Finding examples of graphs in print and electronic media such as newspapers, magazines, and the Internet and interpreting it. Engaging student collect, display, and analyze data to solve problems Engaging in micro lesson design on problem solving involving handling data, teaching with peers and doing critics

Course Assessment	**Modes of Assessment of Indicators**
	COMPONENT 1: Examination **Summary of Assessment methods:** Learners should be summatively assessed by an examination linked to their knowledge of the key mathematical concepts in the Number, Algebra, Geometry and Handling Data within the upper primary mathematics curriculum **Weighting: 40%** **Assesses Learning outcomes: CLO 1**
	COMPONENT 2: Coursework 1 **Summary of Assessment methods:** *Individual/Group Assignments with Presentations* on • the use cooperative learning to address mathematical anxiety • How to identify potential connection between and among concepts within mathematics and other disciplines. • How to make connections between mathematical concepts in Geometry and handling data in the basic education mathematics foundation list). • use of ICT tools to conduct geometrical and statistical investigations emphasising visualization, pattern recognitions, conjecturing etc. (4.1). • models and calculators as thinking tools in and out of the classroom (4.2). *Quizzes/Audits (diagnostic) Individual/Group Assignments* with Presentations on the selection of the most appropriate mathematical method(s) or heuristics for given problems **Weighting: 40%** **Assesses Learning outcomes: CLO 1-5**

	COMPONENT 3: Coursework 2 **Summary of Assessment methods:** *Group Authentic Assignments/Project with presentations* on • identifying appropriate TLMs for teaching topics in Geometry and Handling data • engaging in reflective practice on the their previous Mathematical learning experiences • improvise manipulates for use in Geometry and Handling data lessons *Self/Peer Assessment*: Student teacher should conduct self or peer assessment to rate/evaluate their – awareness of own self and of students as unique individuals – enjoyment and confidence in doing mathematics – appreciation of the contributions and support of colleagues in the mathematics classroom. – cooperation with colleagues in carrying out mathematics tasks in Number, Geometry and Handling data. Student teacher should also engage in reflective thinking about how mathematics was taught in student teachers basic school days **Weighting: 20%** **Assesses Learning outcomes: CLO 4-6**
Teaching/ Learning Resources	Maths posters; Manipulatives and visual aids Computers and other technological tools Set of Mathematical instruments Geoboard (Geodot)
Required Text (Core)	Martin, J. et. al. (1994). *Mathematics for teacher training in Ghana: Tutor notes and students activities* [Chapter 2]. Accra Unimax Publishers.
Additional Reading List	Ministry of Education (2018). *Primary school mathematics standards*. Accra: Ministry of Education.

Science

CONTEXT

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Teachers are not able to help learners to connect classroom science to everyday life, partially because they are not able to realise those connections themselves and partly because schools do not provide a model environment for conceptual understanding and practice. Practice school mentors do not also teach with the intent of mentees to emulate them or keep portfolios that provide evidence of mentees' practices. The new brand of primary science teacher must be able to emphasise on "Preparing to Teach Upper Primary Science to make its study interesting and useful to learners. It is envisaged that the selection of topics for this semester, which will be taught in a highly interactive, engaging and inclusive manner, will produce the required pleasure in learning about "Preparing to Teach Upper Primary Science" in student teachers' environments and support professional handling of uncertain situations, through a combination of rational thinking and complex approaches of cases analyses derived from the student teacher's experiences, and providing practical tools for finding solutions.

Micro equipment practical activities would be carried out so as to engage all learners in hands-on activities to enable to form authentic science concepts. Adaptive equipment would be provided where necessary to remove learning barriers, in order to include all learners. Through such adaptability and inclusion, student teachers will learn to integrate same when they embark on their 6 weeks of collaborative teaching with their mentors and their practicum in the coming semester.

Course Title	**Preparing to Teach Upper Primary Science**						
Course Code		**Level: 300**		**Credit value: 3**		**Semester 2**	
Pre-requisite	Integrated science for Upper Primary II						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminars** ☒	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description	The course, Preparing to Teach Upper Primary Science, uses the universal design for learning approach to extend basic science concepts in the following content areas: sources of magnetism, digestive system and life of a mosquito. This is done through appropriate pedagogies such as Talk for learning approaches, demonstrations, nature walk, concept mapping, problem-based teaching /learning, and video presentations. Authentic assessment modes such as concept mapping, report writing from field trips and nature walks, and mind maps. The teachers' attention must be focused on the need for equity and the provision for SEN. This course will continue to emphasize on the essential attitudes and values of professional science teaching such as honesty, carefulness, accuracy in all class activities and reports from work-based learning. The student teacher, in this course, will strengthen their portfolio and study the topics in upper primary integrated science curriculum for their practicum. Finally, this course will equip the student teachers with skills to continuously develop their professional teaching portfolio and sets targets for their long-life learning (NTS 1b, p. 12, 1c, p. 12; NTS 2b, 2c, p.13).						
Course Learning Outcomes	**Outcomes** On successful completion of the course, student teachers will be able to:			**Indicators**			

	1. Demonstrate knowledge in the concept of magnetism, list the properties of magnets and construct an electric circuit to show the flow of current. (NTS 3a, 3h, p14: NTS 2c, 2d, 2e, p13)			• Student teachers are able to use concept maps to present properties of magnet • Model a sketch of simple electrical circuit.
	1 Demonstrate adequate knowledge and understanding of the life cycle of mosquito, identify and describe the organs of the digestive system as well as how energy is obtained from food (NTS 3a, 3h, p14: NTS 2c, 2d, 2e, p13)			• Present a chat showing the stages of life cycle of mosquito. • Present a model showing organs of the human digestive system. • Provide concept map on functions of the organs of the human digestive system. • Demonstrate the processes of respiration.
	2 Plan a 30-minute lesson on *sources and effect of heat gain or loss in daily life* that ensures that barriers to learning are identified, addressed and overcome(NTS 3a, 3h, p14: 2c, 2d, 2e, p13)			• Prepare a 30-minute activity and fun-filled differentiated (inclusive) lesson plan • Draw chart of the sources of heat and its effect on matter • Devise differentiating activities for special needs/strengths
	3. Co-plan to teach a motivating, fun-filled, learner-centred lesson (with mentor/peer) on *energy* so that it extends the learning of all children, no matter their socio-cultural, linguistic background, age, aptitude, strengths and weaknesses with ICT and multimedia (NTS p.14:3a; NTECF p.20. (KG – P6)			• An all-inclusive lesson plan • Learner-centred multi-media teaching materials • A lesson plan that addresses learners' misconceptions • A list of indigenous beliefs and their corresponding scientific truths
	4. Exhibit professional and ethical teaching standards to respond to the demands of the community (that is, work with mentor, families and external professionals) to demonstrate values such as critical thinking, patience, precision, accuracy, honesty and orderliness (NTS2f, p.1; NTECF p.42)			• Produce reports/photographs on home visits with learners and mentor/ PTAs/ staff meetings • Produce exhibits/photographs of classroom settings that demonstrate removal of barriers to learning • Reports on individual and group wok activities • Produce checklists, Lesson notes, and reflective journals in portfolios • Produce evidence of Tutor/Mentor reports • Photographs or real collection of culturally relevant materials for science lessons
Course Content	**Units**	**Topics**	**Sub-Topics (if any)**	**Teaching and Learning activities to achieve learning outcomes**
	1	Heat and	1.1 Characteristics of magnets and	1.1.1 Engage in practical activities to investigate the

		Magnetism	differences between magnet and non-magnet 1.2 Meaning of heat and sources of heat 1.3 Effect of heat loss or gain (expansion, evaporation, contraction, condensation, water cycle)	characteristics of magnets 1.1.2 Use practical activities to investigate the differences between the terms magnets, magnetic and non- magnetic materials 1.1.3 Brain storm student teachers to come out with the meaning of heat, its sources and its effect on objects 1.1.4 Discuss how heat affect the phases of the water cycle
	2	Life cycle of mosquito	1.2 Stages of life cycle of mosquito	2.1.1 Video/u-tube simulation on the life cycle of the mosquito/practical lab set up to follow life cycle of the mosquito
	3	Digestive system of humans and respiration	3.1 Main organs of digestive and respiratory systems 3.2 Functions of parts of the digestive and respiratory systems	3.1.1 Use of concept mapping to present main organs of the digestive and respiratory organs and their functions 3.2.1 Video/u-tube to study functions of main organs of digestive and respiratory systems
	4	Electrical circuit	4.1 Components of electrical circuits, conductors and insulators	4.1.1 Shower thoughts/discussions on the components 4.1.2 Simulations and multimedia presentations on working electrical circuit.
	5	Co-planned teaching	5.1. Co-planning of varied teaching lessons towards the inculcation of life-long learning practices 5.2. Plan to teach, motivate, assess and extend the learning of all children consistently, no matter their socio-cultural, linguistic background, age, aptitude, strengths and weaknesses 5.3. Co-plan with mentor to deliver challenging, active, fun-filled, learner–	5.1.1. Student teachers make lesson plan with well-defined intended outcomes that take into consideration differentiated instruction and assessment for, as and of learning. 5.2.1 Resident tutor to assign tasks for student teachers to provide answers to during their 6-week internship sessions 5.3.1 Discussion of student teachers' reports on assigned tasks

			centred and motivating lessons with ICT and multimedia (NTS p.14:3a; NTECF p.20. (KG –B9))	
Course Assessment	**Component 1**: Summative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Quizzes/Exams/ Report writing/Poster/ Presentations/ Professional portfolios Core skills to be acquired: Cognitive, literacy, numeracy, writing and reading Weighting: 40% Assess Learning Outcomes: CLO 1, CLO 2, CLO 3			
	Component 2: Formative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Presentations/ Concept Mapping/Practical Activities/ evidence of values learned/Group work/Evidence of equity and inclusivity/transferable skills Core skills to be acquired: Honesty, carefulness, accuracy and tolerance, Weighting: 40% Assesses Learning Outcomes: CLO: 3			
	Component 3: Formative Assessment Practice Summary of Assessment Method: *(Note: Choose one of the following for assessment)*Peer Review evidence of portfolio/lesson plan and annotations/tutorial meetings with the student to discuss their teaching observation progress and areas for development. Core skills to be acquired: Weighting: 20% Assesses Learning Outcomes: CLO4& CLO5			
Instructional Resources	Some resources that would be required to successfully enable an inclusive integrated science teaching would be Laboratory equipment, Chemicals, Smartphones, Tablets, Laptops, Desktop computer, software that allow teachers to work better, Subject based instructional tools/applications, Smart boards, Smart screens, Open ERs – YouTube, projectors and virtual laboratories			
Required Text (Core)	Abbey, T. K., Alhassan, M. B., Ameyibor, K., Essiah, J.W., Fometu, E., & Wiredu, M.B. (2008). *Ghana Association of Science Teachers Integrated Science for Senior High Schools*. Accra: Unimax MacMillan.			

Additional Reading List	Abbey, T.K., &Essiah, J.W. (1995). *Ghana Association of Science Teachers Physics for Senior High Schools*. Accra: Unimax Macmillan. Ameyibor, K. & Wiredu, M. B. (2006). *Ghana Association of Science Teachers Chemistry for Senior High Schools.* Accra: Unimax MacMillan. Oddoye, E.O.K., Taale, K. D., Ngman-Wara, E., Samlafo, V. & Obeng-Ofori, D. (2011). *SWL Integrated Science for Senior High Schools: Students Book*. Accra, Ghana; Sam-Woode Ltd. Zumdahl, S. S., & Zumdahl, S. A. (2009). *Chemistry*. Belmont, CA: Cengage Learning ISBN: 13;978-3311097

Social Studies and TVET

CONTEXT

The course on the **Cultural Landscape and Food Production in Ghana** is developed in response to the need to support student teachers to appreciate the different cultural landscape in Ghana and how they contribute to food production. Ghana is known for its production of primary products with a variety of skills related vocations that support the economy. There is a growing preference for foreign foods with dire implications for food production and self-reliance. This situation is compounded by the absence of a clear national response for promoting Ghanaian indigenous foods contributing to a general lack of knowledge and understanding about food production and how the contributions of the different cultural landscapes and agro-ecological zones influence food production in Ghana. Furthermore, the declining interest among many young persons in participating in agriculture and other skills-based occupations presents a clear and present danger to the sustainability of food production and related support services that promote the economic development of Ghana. The need for the adoption of new attitudes, skills and values towards creating an inclusive indigenous food production environment to inspire consumer preference for Ghanaian indigenous foods are the imperative for this course.

The arrangement of this course satisfies the requirement of the integration of Social Studies and TVET. It equips student teachers with the skills to handle the different strands separately under the specialisms.

Course Title	**Cultural Landscape and Food production in Ghana**						
Course Code		**Course Level:**	**300**	**Credit value:**	**3**		**Semester 2**
Pre-requisite	**N/A**						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☒	**Seminars** ☐	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	The focus of this course is to expose student teachers to the cultural landscape and food production in Ghana and help student teachers to appreciate the contributions of culture in food production and the importance of promoting the consumption of Ghanaian indigenous foods. The course traces the importance of Agriculture and the different areas where some major food crops are produced. It also traces the history of agricultural production with a view to helping student teachers understand the development of agriculture in Ghana. The course builds on previous courses on culture and presents additional information on the agro-ecological zones in Ghana and the locations of the different cultures in Ghana relating to indigenous food production.						

	It also uses a comparative approach to address the challenges posed by the growing preference for non-Ghanaian foods. Ultimately the course examines the implications of conditions highlighted in culture, food production and history of agriculture on the socio-economic development of Ghana. Student teachers at the end of the course will be able to use their knowledge and understanding of the cultural landscape and food production to help learners understand the importance of culture and the sources of the different types of food products in Ghana; Student teachers will also be able to use experiences from the course during their school visits. Student teachers will be assisted to record their experiences in their reflective journals as part of the different artefacts contained in their journals. The course will be delivered using a variety of pedagogical approaches including group discussions, think, pair share, field visits and role plays. The assessment of, for and as learning to measure the achievement of the learning outcomes will use methods such as quizzes, oral presentations, project works, and the evaluation of their recorded experiences in their journals as part of their portfolios. The course takes reference from NTS 1f; 1e; 1g; 2c; NTECF pgs. 16, 55, NTS 3h, NTECF pg. 45	
	Outcomes At the end of the course, students teachers will be able to:	**Indicators**
	CLO1. Use their knowledge and understanding of cultural settlements in Ghana to identify their specific locations on the map of Ghana. (NTS 2c)	• Describe the cultural settlements in Ghana • Draw the map of Ghana and identify the locations of the different cultural settlements.
	CLO2. Demonstrate knowledge and understanding of different culinary practises of the different cultural settlements in Ghana to show the differences between Ghanaian and non-Ghanaian foods. NTS 2g; 3m; NTECF pg. 55).	• Explain the differences in the culinary practices of the cultures in Ghana • Discuss the differences between Ghanaian and non-Ghanaian foods through gallery walk sessions. • Discuss how food can be used to promote culture
	CLO 3. Use their knowledge and understanding of the different agro-ecological zones to describe the different agricultural produce from these areas. (NTS 1f; 2c).	• Explain the different agro-ecological zones in Ghana. • Draw a map of the agro-ecological zones in Ghana and identify the agricultural products produced in these areas.
	CLO 4. Apply their knowledge and understanding of core values and core competencies in 21st century learning to construct new ideas and thoughts on how to promote food through culture and identify ways that Culture and food production can contribute to socio-economic improvement. (1d; 1e; 2c).	• Describe how core values and core competencies of 21st century learning can be applied to promote improvements in Agriculture and the economy. • Identify and explain the different ways to promote Ghanaian food through tourism and leisure.

	CLO 5. Use the ideas from their understanding, knowledge and application of the course in peer teaching and learning. NTS 3h, NTECF pg. 45			• Present a write up of reflections from the course in journals • Share reflections on the application of the outcome of the course in teaching and learning during school visits, record experiences in SRJ and share with colleagues.
Course Content	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and learning activities to achieve learning outcomes**
	1	**Cultural landscapes**	• Cultural settlements in Ghana • Ghanaian indigenous culinary practices (a discussion on the different cultural foods in Ghana; distinction between non-Ghanaian and Ghanaian food types) • Food as expression of culture (Promoting culture through food)	• **Shower Thoughts** to enable student-teachers discuss the cultural settlements and the distinguishing features of the settlements. • **Know-want to know and learnt**; (initiate discussion with student teachers about their knowledge of the different culinary practices of the different cultural groups in Ghana and the distinction between Ghanaian and non-Ghanaian foods. Students teachers indicate what they want to learn, and finally after the lesson indicate what they have learnt). • Use **Debates** (to discuss the differences between Ghanaian and non-Ghanaian foods and food as an expression of culture) • ***Group work*** (Group students between 5-7 members. Ensure that consideration is given to addressing equity and inclusivity concerns). This will enable student teachers to discuss the potential threat to the Ghanaian food as a preferred choice in Ghana).
	2	**Agro-ecological zones in Ghana and food production**	• Agro-ecological zones in Ghana (savanna, forest, transitional (mix of forest and savanna) and coastal)	• **Shower Thoughts** to enable student-teachers discuss the different agro-ecological zones cultural settlements and the distinguishing features of the settlements. • ***Group work*** (Group students between 5-7 members. Ensure that consideration is given to addressing equity and inclusivity concerns). This will enable student teachers to discuss the evolution of food production in Ghana and the links between culinary practise and sources of food production

			• Evolution of production (from hunting and gathering to domestication; subsistence farming to commercialisation) • Links between culinary practices and sources of food production	
	3	**Implications for socio-economic development**	• Health, Safety and Environmental Issues in food production • Tourism and Leisure • Intercultural exchanges • Areas of economic development.	• **Value clarification approach** to enable student-teachers suggest ways to apply core values and 21st century competencies in promoting socio-economic development. • Use **educational visits** to areas of Agricultural production and tourist sites and communities to interact.
	4	**Building learning portfolios**	Writing reflections in Student Reflective Journals (SRJ) from school visits and educational tours	• **Cooperative Learning Techniques (Learning Together Model)** In Learning Together, students-teachers are put into groups of four- or five-members to share experiences from school and educational visits.
Course Assessment: (Educative assessment of, for and as learning)	**Component 1: Examination** **Summary of Assessment Methods** Students teachers are assessed by summative examination on: • Describe the cultural settlements in Ghana • Explain the differences in the culinary practices of the cultures in Ghana • Explain the different agro-ecological zones in Ghana. **Learning Outcomes assessed**: CLO 1; CLO2; CLO 3 **Weighting (40%)**			
	Component 2: Coursework 1 Student teachers assessed through **Class Assignment** with **Oral Presentation** on the following:			

	• Draw the map of Ghana and identify the locations of the different cultural settlements. • Discuss how food can be used to promote culture • Identify and explain the different ways to promote Ghanaian food through tourism and leisure. **Learning Outcomes assessed:** CLO1; CLO 2; CLO 4 **Weighting (40%)**
	Component 3: Coursework 2 Student teachers assessed through **Project Work** on**:** • How core values and core competencies of 21st century learning can be applied to promote improvements in Agriculture and the economy. **Learning Outcomes Assessed: CLO 4** **Weighting (20%)**
Instructional Resources	• Audio-visual Equipment and Video clips on interpersonal relationships and community layouts. • Pictures and posters of components of the community, community and school lay-outs and interpersonal relationships. • Brailler, Scanner and Embosser Sign language (Resource Person). • Internet facility, Laptop computer/PCs, • Insecticides, dewormers, vaccines, fish ponds, farms, gardens,
Required Text (core)	Awedoba, A. K. (2005). *Culture and development in Africa*. Accra: Historical Society of Ghana. Upham, A. A. (2018). *An introduction to agriculture.* New Delhi: F b &c Limited
Additional Reading List	Anderson, M. L. & Taylor, H. F. (2004). *Sociology* (3rded.). Belmont: Wadsworth. Banks, J. A. (1990). *Teaching strategies for the social studies: inquiry, valuing and decision-making*. New York: Longman.

Supported Teaching in School

CONTEXT

Supported teaching in schools (STS) in year three (3) needs to consider planning, placement and classroom practice of the student-teacher in the following CONTEXT which are likely to impact on the effectiveness of placement and practice:

1 The Language policy issues –some student-teachers have not been trained in the dominant L1 to be used as medium of instruction in their placement schools, especially in the upper primary level.
2 Student-teachers often lack knowledge about cultural practices of some of the communities where they are placed.
3 Student-teachers are not adequately equipped to handle issues on ICT integration, equity and inclusivity as well as differentiated learning.
4 Mentors do not usually teach for student-teachers to observe and emulate.
5 Mentors, supervisors and lead mentors are inadequately prepared to support student-teachers.
6 Portfolio assessment, which provides evidence of student-teachers' practice, is not included in their overall assessment which focuses on exams.
7 Knowledge of reflective practice and classroom enquiry is not well developed among student-teachers, mentors, and tutors etc.
8 Poorly resourced partner schools do not provide appropriate environment for practice

Course Title	**STS: Embedding Teaching 2**						
Course Code		**Course Level: 300**	**Credit value: 9**	**Semester 2**			
Pre-requisite	**STS: Embedding Teaching 1** **Pedagogic studies in Year 1 & 2**						
Course Delivery Modes	**Face-to-face**	**Practical Activity**	**Work-Based Learning** √	**Seminars** √	**Independent Study**√	**e-learning opportunities**	**Practicum**
Course Description	STS: Embedding Teaching 2 course is a school-based component of the teacher education programme designed to give student-teachers the opportunity to undertake upper primary classroom enquiry on their teaching and learners' learning. The course is to enable them to teach, motivate, support, manage and extend the learning of upper primary children with increasing consistency, whatever their socio-cultural, linguistic background and regardless of age, aptitude and ability. They are to demonstrate emerging leadership qualities in the upper primary classroom and to contribute to wider school life, being guided by the legal and ethical codes of conduct required by the profession. Student-teachers will develop skills in co-planning and co-teaching sequences of lesson across all required subjects of the school curriculum with regard to cross cutting skills and issues of equity and inclusivity. The course will further enable student-teachers to have a growing understanding of the requirements of the National Teaching Standards in terms of their professional practice, knowledge, values and attitudes, and in particular their professional role as teachers with support from their lead mentors/mentors. The course will further						

	help to provide evidence of agreed targets set to further improve their teaching and strengthen student-teachers' skills in keeping a professional teaching portfolio with specific emphasis on refining work from the previous placement years. Assessment of the course will be by evaluation of the contents in the professional teaching portfolio and teaching evaluation by mentors and supervisors. (NTS 1d, 1f, 1c, 2f) The course duration is: Six (6) continuous weeks in **School (3)** for teaching and learning **(9 credits)**	
Course Learning Outcomes	**Outcomes** Upon completion of the course, student-teachers will be able to:	**Indicators**
	1 Teach, motivate, manage and extend the learning of upper primary children, with increasing consistency, whatever their socio-cultural, linguistic background and regardless of age, aptitude and ability (NTS, 3g, 3k, & 3p).	• Show lesson plans with comments from lead mentor/mentors on consistency, diversity and inclusivity. • Provide list of upper primary learners' needs and differentiated learning identified and compiled. • Show written reports of interventions to address upper primary learners' needs identified in the classroom. • Provide established criteria for assessment of upper primary learners' needs.
	2 Co-plan, co-teach sequences of lessons across all required subjects at the upper primary with regard to cross cutting skills and issues of equity and inclusivity (NTS, 3a).	• Show a prepared Scheme of Work/Weekly forecast indicating roles of mentor and student-teacher • Show prepared lesson plans showing cross cutting skills and issues, equity and inclusivity; and roles of mentor/student-teacher clearly defined • Provide class exercises/assignments showing differentiation in teaching and intended outcomes • Show marked exercises and score sheets of Upper Primary learners under the supervision of mentor
	3 Undertake upper primary classroom enquiry on their teaching and learners' learning (NTS, 3b)	• Provide written report indicating upper primary learners' learning needs identified, data collected, analyzed and conclusions drawn with recommendations to improve teaching in the upper primary classroom under the supervision of mentor.

	4. Demonstrate emerging leadership qualities in the upper primary classroom and to contribute to wider school life, being guided by the legal and ethical codes of conduct required by the profession (NTS, 1c, & 1e)			• Provide schedule of classroom routine duty roster and rules and regulations set with learners. • Show records of active participation in school clubs & co-curricular activities. • Provide notes taken during participation in staff, PTA, SMC and CPD meetings.
	5. Provide evidence of how they are able to meet the Teachers' Standards with the support from their mentors (NTS, 2a, & 3f))			• Provide plan of activities on set targets agreed upon with mentor from the Teachers' Standards • Produce gender responsive cards • Show teaching portfolio with reports from mentors/lead mentors showing progress towards meeting the teachers' standards
	6. Provide evidence of agreed targets set to further improve their teaching (NTS, 1b).			• Provide action plan of personal professional development with emphasis on pedagogical knowledge (PK), PCK and CK under the guidance of mentor
Course Content	**Units**	**Topics:**	**Sub-topics (if any):**	**Teaching and Learning Activities (strategies) to achieve learning outcomes:**
	1	**Preparation for teaching**		• Videos/films/documentary/tactile analysis/audio visual e.g. archival materials to prepare student-teachers in modern trends of teaching and learning • Demonstration and role models of lesson deliveries by tutors in the College
	2	**Teaching upper primary children with diverse backgrounds**		• Plan lessons using differentiated approaches (content knowledge [CK] and pedagogical content knowledge [PCK]) and considering inclusivity, diversity and equity (NTS. 2c, 2f, 3a) • Using appropriate ICT/media tools prepare and use TL resources with clear understanding of diverse learning needs of upper primary learners (NTS. 2f, 3j) • Teach lessons using differentiated approaches and considering inclusivity, diversity and equity (NTS. 2f, 3f)

				• Assess upper primary children using differentiated approaches and mark the assessment tasks given based on objective criterion referencing (NTS. 3p) • Plan other out-of-class activities to consolidate and extend upper primary children learning (field trips, excursions etc.) [NTS 2e]
	3	**Team teaching: Co-plan, co-teach, co-assess**		▪ Co-plan sequences of lessons/scheme of work across all required subjects at the upper primary ▪ Co-prepare individual lessons taking into consideration upper primary learners with diverse learning needs and setting differentiated learning outcomes (NTS. 2f, 3f) ▪ Match teaching and learning activities with resources/media/ICT to support upper primary learners in achieving intended learning outcomes in all lesson plans (NTS 3j) ▪ Co-teach lessons with mentor as agreed in lesson plan and reflect together [NTS. 1a] ▪ Observe and record good practices in whole class & small group teaching & learning (NTS 3d) ▪ Mark and grade class exercises under the guidance of the mentor ▪ Post -teaching conference to give feedback to student-teacher
	4	**Classroom enquiry: teaching and upper primary learners' learning**		▪ Identify problem(s) regarding teaching and learning interaction ▪ Collect data to justify identified problem ▪ Use simple descriptive analysis to analyse data collected and use appropriate ICT tools to structure findings ▪ Propose solution to the identified problem in a brief report. (NTS 3b)

	5	**Leadership**	Leadership qualities in the classroom and the wider school life.	• Set classroom rules and regulations agreed upon with learners and display on wall [NTS. 1c] • Support patrons and actively participate in school clubs and co-curricular activities • Attend staff, PTA, SMC, CPD meetings and take notes • Participate in morning and closing assemblies and be part of play/lunch time activities (especially Upper Primary student-teachers). [NTS. 1c; 1e] • Reflect on your leadership qualities and record in SRJ
	6	**National Teachers' Standards**	Meeting the National Teachers' Standards for Ghana	• Agree with mentor to identify and select standards that are achievable within the period • Set targets with timelines agreed with mentor • Develop action plan and specific tasks to achieve set targets [NTS.2b] • Prepare gender responsive scorecards under the supervision of mentor. [NTS. 3f] • Continue building professional teaching portfolio achieved TS targets
	7	**Targets for Lifelong Learning**		• Reflect and identify content, pedagogical knowledge (CK, PK, & PCK) needs as well as other personal and professional developmental needs • Use appropriate ICT tools to design a personal action plan with targets to build capacity in PK and PCK/CK for progression [NTS. 1b] • Agree with mentor on monitoring & completion of target and keep copy in portfolio
Course Assessment (Educative assessment: of, for and as learning)	**Component 1: Evaluation of teaching (by Tutor and Mentor) (NTS, 1d, 1e, 1f & 1g)** **Summary of Assessment Method**: Evaluation of teaching which may include the following: Lesson plan and notes with understanding of Basic School Curriculum; Teaching and learning resources; Personal teaching philosophy statement; Learner's marked exercises with comments from student-teacher;			

	Assessment records (comments from tutor/mentor/lead mentor). This is assessment of learning and assessment for learning **Weighting**: 30 % (i.e. Mentors 20 and Supervisors 10) **Assesses Learning Outcomes:** co-plan, co-teach Teach, motivate, manage and extend the learning of all children, with increasing consistency, whatever their socio-cultural, linguistic background and regardless of age, aptitude and ability (CLO, 1 & 2).
	Component 2: Evaluation of Classroom enquiry report (NTS, 3b) **Summary of Assessment Method**: Evaluation of classroom enquiry report with rubrics/criteria which may include: ▪ Collection of data to justify identified problem ▪ Simple descriptive analysis of the collected data using appropriate ICT tools ▪ Proposed solution to identified problem in a brief report This is assessment for learning and assessment as learning Weighting: 40% **Assesses Learning Outcomes:** Undertake classroom enquiry on teaching and learners' learning **(CLO, 3)**
	Component 3: Professional Teaching Portfolio (NTS, 1d, 1e, & 1f) **Summary of Assessment Method**: Presentation and inspection of the items in the teaching portfolio including: Student Reflective Journal (SRJ), Field notes and other artefacts, Notes taken at staff/SMC, PTA meetings and CPD, Pre- and Post-observation conference reports from mentor/tutor, personal teaching philosophy statement etc. This is assessment of learning and assessment as learning Weighting: 30 % **Assesses Learning Outcomes:** Provide evidence of how they are able to meet the Teachers' Standards with the support from their mentors & agreed targets set to further improve their teaching **(CLO, 4, 5, & 6)**.
Instructional Resources	• Videos/audio visual/tactile analysis of mentoring and coaching • Videos/audio visual/tactile of Classroom teaching & learning • Samples of classroom observation checklists (braille and written) • Samples of professional teaching portfolios • Samples of reflective log/SRJ • Samples of good/bad lesson plans • Samples of Staff/SMC/PTA meeting notes • Tutor professional development handbook • Samples of feedback instruments • T-TEL materials from www.t-tel.org • TESSA materials from www.tessafrica.org

Required Text (Core)	Cohen, L.; Manion, L. Morrison, K., & Wyse, D. (2010). *A guide to teaching practice* (5th ed.) New York: Routledge. McIntosh, P. (2010). *Action research and reflective practice: Creative and visual methods to facilitate reflection and learning.* London: Sage. Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). *Pedagogy, curriculum, teaching practices and teacher education in developing countries. Education rigorous literature review*. Department for International Development on: Routledge.www.teachersnetwork.org/tnli/research
Additional Reading List	Conn, K. (2014). *Identifying effective education Interventions in Sub-Saharan Africa: A meta-analysis of rigorous impact evaluations* (Doctoral dissertation, Columbia University). Lane, K. L., Carter, E. W., Common, C., and Jordan, A. (2012). Teacher Expectations for Student Performance: Lessons Learned and Implications for Research and Practice, in Bryan G. Cook, Melody Tankersley, Timothy J. Landrum (ed.) Classroom Behavior, Contexts, and Interventions (Advances in Learning and Behavioral Disabilities, Volume 25) Emerald Group Publishing Limited, pp. 95-129. Ormrod, J.E. (2014). *Educational psychology: Developing learners.* Pearson: Boston. The Sabre Charitable Trust, (2017). *Assessment manual*. Accra: Conker House Publishing Ltd. Vavrus, F., & Bartlett, L. (2013). 'Testing and teaching.' In: F. Vavrus& L. Bartlett (Eds.), *Teaching in tension: International pedagogies, national policies, and teachers' practices in Tanzania (93-114).* Rotterdam: Sense.

Year Four Semester 1

Portfolio Development

CONTEXT

Over the past decade, there has been a growing body of knowledge about the need for teaching portfolios. It is estimated that thousands of colleges and universities around the world, have adopted and implemented portfolio development as part of pre-service teacher education programmes. The teacher education reform in Ghana provides a unique opportunity for the introduction of portfolio development in teacher education.

Course Title		**Teaching Portfolio**					
Course Code			**Course Level: 400**	**Credit value: 3**			**Semester 1**
Pre-requisite	STS: Beginning Teaching (I &II) STS: Developing Teaching (I &II) STS: Embedding Teaching (I &II)						
Course Delivery Modes	✓ **Face-to-face**	✓ **Practical Activity**	✓ **Worked-based Learning**	**Seminars**	✓ **Independent Study**	✓ **E-Learning**	✓ **Practicum**
Course Description	Teaching portfolio is a collection of artifacts accompanied by reflective narrative that not only helps the learner to understand and extend learning but invites the reader of the portfolio to gain insight about learning and the learner. The portfolio includes teaching philosophy, reflective practice, reflective log, and learners' difficulties in learning and how they help learners to overcome particular problems. Student teachers are expected to develop their professional portfolios which will be assessed during and after internship. The portfolio will be used during the induction period, will be assessed again during licensure, and consequently reflect teachers' professional dossier (NTS 1a, 1b, 1f, 2a, 2c, 3a, 3b).						

Course Learning Outcomes	Course Learning Outcomes	Indicators
	CLO 1: demonstrate advanced knowledge and understanding of portfolio development CLO 2: exhibit advanced skills in developing a professional teaching portfolio CLO 3: produce professional teaching portfolio for assessment. (NTS 1a, 1b, 1f, 2a, 2c, 3a, 3b)	1.1 describe by identifying the main elements in their professional teaching portfolio 1.2 Justify the relevance of developing a professional teaching portfolio 2.1 create a professional teaching portfolio **3.1** submit a professional teaching portfolio for assessment
Course Assessment	**Component 1: Developing a professional teaching portfolio (Assessment for/as learning).** Weighting: 40% Addresses: CLO 1 & 2 **Component 2: Submission of professional teaching portfolio (Assessment of learning)** Weighting : 60% Addresses CLO 3 **Cores Skills to be developed**: Creative and Critical thinking, Communication, Collaboration, Problem Solving, Commitment to life-long learning, Information and Communications Technology.	
Required Text (Core)	Barrett, H. (2000). Electronic teaching portfolios: Multimedia skills + portfolio development = powerful professional development. In B. Cambridge (Ed.), Electronic Portfolios (pp. 110-116). Washington, DC: American Association for Higher Education. Seldin, P. (2004). *The teaching portfolio: A practical guide to improved performance and promotion/tenure decisions*. Bolton: Anker Publishing Co.	
Additional Readings	O'Neil, C., & Wright, A. (1992). *Recording teaching accomplishment: A Dalhousie guide to the teaching dossier*. Halifax, NS: Dalhousie University, Office of Instructional Development and Technology. Ross, D., Bondy, E., Hartle, L., Lamme, L., and Webb, R. (1995). Guidelines for portfolio preparation: Implications from an analysis of teaching portfolios at the University of Florida. *Innovative Higher Education, 20 (1)*, 45-62. Seldin, Peter and Associates (1993). *Successful use of teaching portfolios*. Bolton: Anker Publishing. Shore, Bruce M., et al (revised 1986, reprinted 1991). *The CAUT guide to the teaching dossier. Its preparation and use*. Ottawa, Ontario: Canadian Association of University Teachers. Teaching Documentation Guide (1993). *Senate committee on teaching and learning*. Toronto: York University.	

	University Teaching Services (1996). *Teaching dossier: A guide*. Edmonton, Alberta: University of Alberta. Urbach, F. (1992). *Developing a teaching portfolio*. College Teaching 40 (2), 71-74. Weeks, P. (1998). The teaching portfolio: A professional development tool. *International Journal of Academic Development, 3(1)*, 70-74.

Action Research Project

CONTEXT

Upper Primary teachers are expected to exhibit a thorough knowledge of the classroom setting and the wider school environment to enable them reform and reinforce learning. This requires adequate skills in conducting action research. However, it has been observed that most Upper Primary School teachers need the skills in examining schools related problems that affects learning and understand the procedures for conducting an action research and implement interventions to support all Upper Primary learners.

Course Title		**Action Research Project**					
Course Code			**Course Level: 400**	**Credit value: 3**			**Semester 1**
Pre-requisite	Inquiry and Action Research						
Course Delivery Modes	✓ **Face-to-face**	✓ **Practical Activity**	✓ **Worked-based Learning**	**Seminars**	✓ **Independent Study**	✓ **E-Learning**	✓ **Practicum**
Course Description	The Action research project work is the practical school-based component of the teacher education programme. This is designed to give student-teachers the opportunity to identify, diagnose and justify a problem in the classroom context and introduce some intervention(s) to improve teaching and learning. The point of emphasis is that the student-teacher is expected to propose an intervention to address the identified problem in consultation with mentor and link tutor. The student teacher will employ action research scientific approach to address and report on the phenomenon (NTS: 3b, 3c, 3d, 3m, 3n).						

Course Learning Outcomes	Course Learning Outcomes	Indicator
	CLO 1: demonstrate knowledge and understanding of scientific Action Research procedures. CLO 2: exhibit skills in executing Action Research procedures CLO 3: produce Action Research Project report for assessment. (NTS 3b, 3c, 3d, 3m, 3n)	1. identify and diagnose an action research problem 2. write and implement an Action Research proposal 3. submit an Action Research Project Report in line with approved guidelines.
Course Assessment	**Component 1: Implementation of Action Research Project (Assessment for/as learning).** Weighting: 40% Addresses: CLO 1 & 2 **Component 2: Action Research Project Report (Assessment of learning)** Weighting : 60% Addresses CLO 3 **Cores Skills to be developed**: Creative and Critical thinking, Research and Communication, Collaboration, Problem Solving, Commitment to life-long learning, Information and Communications Technology.	
Required Text (Core)	Ackummey, M. A. & Kankam, G. (n.d.). *Educational action research*. Winneba: Centre for Teacher Development and Action Research. Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education (7th ed.)*. New York: Routledge.	
Additional Readings	Collins, J. (2004). Education techniques for life-long learning. *Radiographics, 24,* 1484-1489. Fraenkel, J. R., & Wallen, N. E. (2009). How to design and evaluate research in education. New York: McGraw-Hill. Kankam, G. & Weiler, J. (2010). *A guide to action research for colleges of education and universities*. Accra: Readwide Publishers. Mugenda, O. M., & Mugenda, A. G. (2009). *Research methods: Quantitative and qualitative approaches*, Nairobi: Acts Press. Norton, L. S. (2009). *Action research in teaching and learning: A practical guide to conducting pedagogical research in*	

	universities. London: Routledge. Somekh, B. (2006). *Action research: A methodology for change and development*. London: Open University Press. Tomal, D. R. (2010). *Action research for educators*. New York: Rowman and Littlefield Education.

Supported Teaching in Schools

CONTEXT

Supported teaching in schools (STS) in year four (4) needs to consider planning, placement and classroom practice of the student-teacher in the following CONTEXT which are likely to impact on the effectiveness of placement and practice:

1. The Language policy issues –some student-teachers have not been trained in the dominant L1 to be used as medium of instruction in their placement schools, especially in the upper primary level.
2. Student-teachers often **lack knowledge about cultural practices of some** of the **communities** where they are placed.
3. Student-teachers are not **adequately equipped to handle issues** on ICT integration, equity and inclusivity as well as differentiated learning.
4. Mentors do not usually teach for student-teachers to observe and emulate.
5. **Portfolio assessment, which provides evidence of student-teachers' practice is not included in their overall assessment** which focuses on exams.
6. Knowledge of **reflective practice and classroom enquiry** is not well developed among student-teachers, mentors, and tutors etc.
7. **Mentors, supervisors and lead mentors are inadequately prepared** to support student-teachers.
8. **Residential accommodation in communities for students is not easy** to come by especially for female student-teachers.
9. **Poorly resourced partner schools** do not provide appropriate environment for practice.

Course Title	**STS: Extending Teaching (Internship)**						
Course Code		**Course Level:400**	**Credit value: 12**	**Semester 1**			
Pre-requisite	• STS: Embedding Teaching 1, 2, & 3 • Pedagogic studies in Year 1, 2, & 3						
Course Delivery Modes	**Face-to-face**	**Practical Activity**	**Work-Based Learning**	**Seminars**	**Independent Study**	**e-learning opportunities**	**Practicum√**
Course Description	Extended Teaching (1) course is a school-based component of the teacher education programme designed to give student-teachers the opportunity to independently plan to teach, motivate and extend teaching. The course aims at equipping student-teachers with the skills and competencies to demonstrate through their teaching a comprehensive understanding of the Upper Primay school curriculum. Also, the course aims at equipping student-teachers with the requisite skills to undertake action research to guide and improve their teaching. The course will further equip student-teachers with Upper Primary classroom management and organization skills. They will develop the leaderships skills needed to function effectively in the schools setting and wider school communities as required by the NTS. This course will equip student-teachers with the needed skills to continuously develop their professional teaching portfolio and set targets for improving their lifelong learning skills. Assessment of the course will be by the teaching evaluation, Professional Portfolio and the action research (project work) (NTS, 1b, 1c, 1d, 2b, 2e, 2f, 3b, 3g, & 3f).						
Course Learning Outcomes	**OUTCOMES** **Upon completion of the course, student-teachers will be able to**:			**INDICATORS**			
	CLO1. Demonstrate knowledge and skills in planning, teaching, motivating, assessing and extending consistently the learning of all upper primary children whatever their socio-cultural, linguistic background and regardless of age, aptitude and ability, consistently and independently (NTS, 1a, 2f, 3a, & 3f).			• Write lesson plans that align content with the appropriate instructional and assessment strategies to meet the needs of students in an inclusive classroom. • Use a variety of appropriate instructional strategies in teaching content planned for lessons • Show records of lessons taught and assessed with diverse learning needs and differentiated learning outcomes in focus • Provide established criteria for assessment of Upper Primary learners' needs. • Show report of small group discussions between mentors & peers about learners' needs and how to motivate the learners of diverse			

		backgrounds.
	CLO 2. Demonstrate through their teaching a comprehensive knowledge understanding of the Upper Primay school curriculum and related expectations before, during and after their specialism (NTS, 2b)	• Write lesson plans that align with the key components of the basic school curriculum • Provide lesson plans that reflect diversity in terms of learners' age, grade level, expectations, aptitude and ability • Show that lesson delivery aligns with the components of the lesson plan
	CLO 3. Demonstrate comprehensive skills in conducting action research as project work to support Upper Primary children's learning (NTS, 3b)	• Produce action research report using the prescribed format by using appropriate ICT tools
	CLO 4. Demonstrate skills in effective classroom management and organization(NTS, 3d)	• Display agreed classroom management rules and regulation (e.g. flyers, hand bills, posters, wall hanging, embossers etc. • Provide report of innovative ways of rewarding exemplary behaviours e.g. well-dressed, punctuality, etc.
	CLO 5. demonstrate skills in developing and maintaining positive working relationships with other teachers and school personnel as appropriate as well as interacting with learners, parents/guardians, and the wider school community as guided by the legal and ethical codes of conduct required by a professional teacher (NTS, 1c, & 1e)	• Provide record of active participation in school wider activities/meetings, PTA, SMC, CPD, staff and co-curricular activities through field notes and mini reports • Show documentation of professionalism practices recorded in the SRJ
	CLO 6. Demonstrate comprehensive skills in developing professional teaching portfolio (NTS, 1a, 1e, & 1f)	• Show professional teaching portfolio with evidence from student-teacher's observations, teaching and wider school community activities
	CLO7. Demonstrate skills in critical reflection on class teaching, wider school observation and record in students' reflective journal (NTS, 1a)	• Document critical reflections of class teaching and wider school observations in SRJ

Course Content	Units	Topics:	Sub-topics (if any):	Teaching and Learning Activities (strategies) to achieve learning outcomes:
	1	**Teaching**	Preparation of lesson plan/notes	• Plans lessons using differentiated approaches (content knowledge[CK] and pedagogical content knowledge[PCK]) and considering inclusivity, diversity and equity and setting differentiated learning outcomes (NTS.2c. 3a) • Plans other out-of-class activities to consolidate and extend Upper Primary pupils' learning (field trips, excursions etc.) (NTS. 3i)
			Preparation of teaching-learning resources	• Using appropriate ICT/media tools prepare and produce varieties of TLMs/resources with clear understanding of diverse learning needs of learners (NTS 3.j)
			Instructional delivery	• Based on their philosophy, student-teachers teach the appropriate lessonusing differentiated approaches and considering inclusivity, diversity and equity and setting differentiated learning outcomes (NTS.3e) • Match teaching and learning activities with resources/media/ICT to support Upper Primary learners in achieving intended learning outcomes and progression in all lesson plans (NTS. 3f; 3j) • Employs instructional strategies that promotes active participation and critical thinking of learners (NTS. 3e. 3h) • Listens to all learners, reflects and provides constructive feedback (NTS. 1a; 3l) • Create a safe and encouraging learning environment appropriate for students from diverse background (NTS.3c)

			Assessment and Motivation of students	• Track the planning, teaching and learning of a topic or the development of an essential skill in all subjects to identify students' progress, strengths and weakness (NTS. 3m) • Employs assessment models that critically reflect national and school learning outcomes to measure differentiated learning outcomes of learners (NTS. 3k, 3o; 3p) • Marks and grades class exercises (NTS.3l) • Provide timely and specific feedback to learners and parents/guardians (NTS.3n.) • Use appropriate and creative means to reward and motivate learners based on their identified unique characteristics (NTS.3p)
	2	**Demonstrate understanding of the school curriculum**		• Plan lessons that align with the key components of the Upper Primary school curriculum (NTS.2b ; 2f)) • Deliver lessons that reflect diversity differentiated learning outcomes (NTS. 2f)
	3	**Action Research**		• Identify and justify a problem to serve as the purpose of the action research under the guidance of the mentor/tutor • Review literature based on identified problem and interventions to be used • Propose an intervention to address the identified problem in consultation with mentor/tutor • Use appropriate sampling and data collection procedure to carry out proposed intervention. • Adhere to ethical protocols in conducting research • Analyze and discuss data to draw conclusions from findings • Write the action research report using the prescribed format. (NTS. 1d. 2b)

	4	**Classroom management and organization**		• Set classroom management rules and regulations • Discuss rules with students • Adhere to the rules during lesson delivery • Create a safe learning environment and manage behaviour and learning.(NTS. 1c; 1f; 3c)
	5	**Effective leadership qualities in wider school life**		• Access, review and work with school plans, policies, documentation, and resources (NTS. 2a) • Attend, participate, and take field notes, minutes of meetings and artefacts of CPD, PTA, SMC programmes (NTS. 1c.; 1e &1g)
	6	**Student Reflective Journal**		• Demonstrate improved and developed reflective practice skills or skills of critical reflection • Continue to keep a student reflective journal recording important events (NTS. 1a)
	7	**Develop professional teaching portfolio**		• Examine contents of professional teaching portfolios built from previous years to indicate progression • Continue to improve and build upon portfolio/ e-portfolio / guided by mentors (NTS. 1b)
		Targets for Lifelong Learning		• Reflect and identify content, pedagogical & PCK as well as other personal and professional developmental needs • Use appropriate ICT tools to design a personal action plan with targets to build capacity in PK and PCK/CK for progression. • Agree with mentor on completion of targets set and keep copy in portfolio (NTS. 1b)
Course Assessment (Educative assessment: of, for and as learning)	**Component 1:** Evaluation of teaching (NTS, 1d, 1e, & 1f) **Summary of Assessment Method**: Formal evaluation of teaching mentor/tutor may include the following: • Lesson plan and notes • Teaching and learning resources • Personal teaching philosophy statement • Learner's marked exercises with comments			

	• Classroom organization and management skills • Understanding of school curriculum • Mentor observation report Weighting: 100% This is assessment of learning and assessment for learning **Assesses Learning Outcomes:** Plan for, teach, motivate, assess and extend consistently the learning of all children whatever their socio-cultural, linguistic background and regardless of age, aptitude and ability, consistently and independently. **[CLO 1&2]**

	Component 2: Action Research (NTS, 3b) **Summary of Assessment Method**: Evaluation of a written action research report adhering to the rubrics and criteria which may include: • Introduction/Background • Literature Review • Methodology/intervention • Linking findings to improvement in Practice • Conclusion This is: assessment for learning **Assesses Learning Outcomes:** Undertake action research as project work to support children's learning **[CLO 3]**
	Component 3: Professional Teaching Portfolio/e-portfolio (NTS, 1a, 1e, & 1f) **Summary of Assessment Method**: Well organised and structured, representative, selective and showing creativity and well presented. Contents may include the following: Lesson plans, lesson evaluations, Notes of staff meetings, SMC/PTA/CPD meetings, Learners' marked exercises with comments, photos, field notes, TLMs, Personal teaching philosophy, child study, SRJ etc. Weighting: 100 % This is: assessment of learning and assessment as learning **Assesses Learning Outcomes:** Develop a professional teaching portfolio with evidence from student-teacher's observations, teaching and wider school community activities [CLO 6, 7]
Instructional Resources	• Videos/audio visual/tactile analysis of mentoring and coaching • Videos/audio visual/tactile of Classroom teaching & learning • Samples of classroom observation checklists (braille and written) • Samples of professional teaching portfolios • Samples of reflective log/SRJ • Samples of good/bad lesson plans • Samples of Staff/SMC/PTA meeting notes • Tutor professional development handbook • Samples of feedback instruments

Required Reading List (Core)	Cohen, L.; Manion, L. Morrison, K., & Wyse, D. (2010). *A guide to teaching practice* (5th ed.) New York: Routledge. McIntosh, P. (2010). *Action research and reflective practice: Creative and visual methods to facilitate reflection and learning.* London: Routledge. Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). Pedagogy, curriculum, teaching practices and teacher education in developing countries: Education rigorous literature review. Department for International Development on: Routledge. Retrieved from *www.teachersnetwork.org/tnli/research*.
Additional Reading lists	Conn, K. (2014). *Identifying effective education interventions in Sub-Saharan Africa: A meta-analysis of rigorous impact evaluations* (Doctoral dissertation, Columbia University). Lane, K. L., Carter, E. W., Common, C., and Jordan, A. (2012). Teacher expectations for student performance: Lessons learned and implications for research and practice. In Bryan G. Cook, Melody Tankersley, Timothy J. Landrum (Eds.) Classroom Behavior, Contexts, and Interventions (Advances in Learning and Behavioral Disabilities, Volume 25) Emerald Group Publishing Limited, pp. 95-129. Ormrod, J. E. (2014). *Educational psychology: Developing learners.* Pearson: Boston. The Sabre Charitable Trust, (2017). *Assessment manual*. Accra: Conker House Publishing Ltd. Vavrus, F., & Bartlett, L. (2013). 'Testing and teaching.' In: F. Vavrus & L. Bartlett (Eds.). *Teaching in tension: International pedagogies, national policies, and teachers' practices in Tanzania (93-114).* Rotterdam: Sense.

Year 4 Semester 2

Pedagogic Knowledge with ICT & Inclusion: SEN/Gender

CONTEXT

The successful implementation of any educational programmes is hinged on effective school administration, monitoring and supervision. Primary school teachers, some of whom may become heads of schools and administrators, require sound knowledge, understanding and application of school administration and management principles. Further, primary schools are attached to schools are community owned. There is therefore the opportunity for collaboration and relationship between schools and communities. Some primary school teachers also need to have equal access to adequate teaching and learning resources in schools. There is therefore the opportunity for collaboration and relationship between schools and communities. Some teachers however, do not have equal access to adequate teaching and learning resources in schools while others lack curriculum leadership and the holistic understanding needed for implementing the curriculum, and managing the transition of learners from primary school to Junior High School.

Course Title	**School Administration and Management**						
Course Code:	**Course Level: 400**			**Credit value: 3**		**Semester 2**	
Pre-requisite	**Student teachers have been undertaken supported teaching in schools**						
Course Delivery Modes	**Face-to-face: [√]**	**Practical Activity [√]**	**Work-Based Learning: [√]**	**Seminars [√]**	**Independent Study: [√]**	**E-Learning[√]**	**Practicum: [ ]**
Course Description for significant learning (indicate NTS, NTECF, BSC GLE to be addressed)	The course is designed to expose student teachers to the conceptual, theoretical, and practical issues in basic school administration and management with special reference to Ghana. It examines the meanings and purposes of basic school administration and management and the specific duties of the basic school headteacher. The course seeks to help student teachers to understand and apply the principles of the various schools of administrative thought and assist student teachers to understand and apply concepts and issues in leadership including gender and inclusivity to ensure effective administration of basic schools. It seeks to provide a sound knowledge and understanding of the concepts of communication and decision making, and demonstrate how teachers and other stakeholders could be effectively involved in decision making process in basic schools. Furthermore, the course seeks to provide opportunities to student teachers to observe, report and analyse practical administrative, management and leadership styles. These will enable student teachers to take up leadership positions in the future to ensure effective supervision and administration of basic schools. It will also equip student teachers with skills to manage transition of learners from Upper Primary to JHS. The course help student teachers to understand and demonstrate that collaborative, partnership and team work are essential approaches to be welcomed by all teachers. teaching Differentiated interactive techniques (including pyramid and panel discussions,						

	role play, audio-visual and tactile analysis, diamond nine, shower thoughts) and assessment procedures (individual and group projects, reports and presentations, case studies, assessment inventories and digital/manual portfolios will be employed in the learning process to enable student teachers apply the various administrative and management principles and theories in the classroom and the basic school as a whole **(NTECF, NTS 2d, 3e, 3k, 3p, 3l, p.18)**.	
Course Learning Outcomes	**Course Learning Outcomes** On successful completion of the course, student teachers will be able to:	**Indicators**
	CLO 1. demonstrate knowledge and understanding of the nature and functions of administration and management **(NTS 1e, 2a, 3c, 3d).**	• Explain the concepts administration and management. • Discuss the functions of administration and management (POSDCoRB) and their classroom or school implications. • Discuss the uniqueness of primary school administration. • Identify the challenges encountered in the administration of primary schools.
	CLO 2. demonstrate knowledge and understanding of the reasons for classifying the basic school as a formal organisation, and the duties of headteachers of primary schools**(NTS, 3e).**	• Explain organisation and identify the types of organisation. • Compare and contrast the features of formal and informal organisations. • Discuss the reasons for the uniqueness of the administration of primary schools. • Discuss the specific and general duties of primary schools headteachers. • Explain the role of headteachers mobilising resources for the administration of primary schools.
	CLO 3. critically review the various schools of administrative thought and their applications to the educational setting **(NTS 1a)**	• Compare and contrast the different schools of administrative thought. • Discuss the educational implications of the principles of schools of administrative thought.
	CLO 4. demonstrate knowledge and understanding of the concept of leadership, and apply the theories and styles of leadership in achieving cordial school-community relationships **(NTS,1d)**	• Explain the concept of leadership • Identify and explain the theories of leadership. • Explain the various leadership styles and discuss their merits and demerits.

		• Discuss the leadership qualities that relate to student teachers' experiences during supported teaching in school. • Discuss the appropriate strategies adopted by headteachers of primary schools to achieve cordial school-community relationship.
	CLO 5. exhibit understanding and application of communication, decision-making and supervision in the administration of primary schools **(NTS 1e, 2d, 3f)**.	• Explain the concepts communication, decision-making, and supervision. • Discuss the need for effective communication, decision-making and supervision in inclusive classrooms and schools. • Identify the various barriers to effective communication, decision-making and instructional supervision in inclusive classrooms and schools. • Identify the strategies that promote effective communication and decision-making in primary schools. • Discuss the criteria for appraising teachers.
	CLO 6. exhibit knowledge and understanding of school climate and school-community partnership **(NTS 1e, 1f, 1g, 2f, 3h, 3o)**.	• Explain school climate and its types. • Discuss the determinants and importance of school climate. • Explain the meaning, types and principles of school-community partnership. • Discuss the need for effective school-community partnership and ways to achieve it. • Identify the appropriate strategies for effective delegation and handling of conflicts in primary schools and the community. • Discuss the role of GES, SMC, Board of Governors, PTA, in fostering cordial inclusive primary school-community partnership.
	CLO 7. demonstrate understanding of professional ethics and values that portray teachers as good role models in the school and community **(NTS 1c, 1d, 1f, 1g, 2a, 2c, 3n, 3o)**.	• Identify the major National Teachers' Standards and code of ethics that relate to their experiences during supported teaching in schools. • Discuss how student teachers could become good models in the school and community based on their experiences during supported teaching in schools.

	Units	Topics:	Sub-topics (if any):	Suggested Teaching Learning Activities
	1	Nature of basic school administration and management	• Meaning of administration and management • Differences and similarities of administration and management • Meaning and educational implications of POSDCoRB • Unique nature of administration of inclusive primary schools • Challenges and barriers encountered in the administration of inclusive primary schools. • How to manage transition from Upper Primary to JHS.	• Panel discussion on the meaning, differences and similarities of administration and management. • Shower thoughts for meaning and educational implications of POSDCoRB. • Talk for learning approaches on uniqueness of administration of inclusive primary schools. • Individual and group power point presentations on barriers to administration of primary schools.
	2	The school as an organisation and the duties of headteachers of inclusive basic schools.	• Meaning, types and characteristics of organisations • Differences and similarities between formal and informal organisations • Features of an inclusive basic school as a formal organisation; duties of the headteacher in inclusive basic schools • Role of the headteacher in mobilising resources for the administration of inclusive primary schools.	• Student-led discussion on the meaning, types and characteristics of organisations. • Individual power point presentation on differences and similarities of formal and informal organisations. • Group power point presentations on the duties of headteachers in inclusive basic schools. • Seminar on the role of headteachers in mobilising resources for the administration of inclusive primary schools.
	3	Schools of administrative thoughts and their educational implications	• Scientific management approach and its school implications • Administrative management approach and its school implications • Bureaucratic approach and its implications	• Concept mapping on schools of administrative thought. • Pyramid and panel discussion on the principles of the various schools of administrative thought.

			• Human resource approach and its school implications • Theories X, Y and Z, and their school implications	• Individual and group presentations on the educational implications of the principles of the schools of administrative thought. • Case studies on the applicability of theories X, Y and Z in the administration of primary schools.
	4	Leadership in inclusive basic schools	• Conceptual issues in leadership (leadership as a trait, an ability, a skill, a behaviour, a relationship, an influence, definitions and importance of leadership, Curriculum leadership, Instructional leadership, gender and leadership, differences between leadership and management) • Leadership Theories (trait, behavioural, situational); Forms of Leadership (transactional, transformational, laissez-faire); Sources of leadership power (reward, coercive, expert, referent, legitimate/traditional) • Attributes of a good leader; Leadership styles and skills; Challenges encountered in the administration of inclusive primary schools.	• Group power point presentations on the meaning of leadership, curriculum leadership, instructional leadership, gender and leadership, and differences between leadership • and management. • Individual and group projects using ICT to illustrate leadership theories. • Shower thoughts to teach importance of leadership • Talk for learning approaches to teach sources of leadership, attributes, skills and styles of leadership. • Audio-visual and tactile analysis to teach leadership styles, skills, and attributes of a good leader. • Role play and reflective notes to teach styles, skills and attributes of a good leader. • Diamond nine, concept cartooning and mapping to teach challenges encountered in the administration of inclusive primary schools.

	5	Communication, decision making and supervision in inclusive primary schools	• Meaning and the need for effective communication; • Processes, types and channels of communication • Barriers and guide to effective communication • Meaning and importance of decision making • Effective ways to involve teachers in decision-making • Meaning and the need for supervision • Types and models of supervision, with emphasis on clinical supervision	• Shower thoughts to elicit meaning, types, channels, and the need for effective communication. • Panel/pyramid discussion to teach barriers and guide to effective communication • Tutor-led discussion on meaning and importance of decision-making in inclusive primary schools. • Audio-visual and tactile analysis of effective ways to involve teachers in decision-making. • Individual and group projects on types and models of supervision, with emphasis on clinical supervision.
			• Role of GES, SMC, PTA, DEOC, MOE, NGOs, National Inspectorate Board, National Teaching Council in the supervision and administration of inclusive basic schools • Criteria for appraising teachers • Challenges of supervision in inclusive primary schools. • Ministries and Agencies that provide services to the disabled	• Resource persons and discussions to teach the role of GES, SMC, PTA, DEOC, MOE, NGOs, National Inspectorate Board, National Teaching Council in the supervision and administration of inclusive primary school. • Individual and group power point presentations on criteria for appraising teachers • Think-pair share to teach challenges of supervision in inclusive primary schools. • Team teaching/Resource persons to teach Ministries and Agencies that provide services to the disabled.

	6	School climate and school-community partnership	• Meaning and types of inclusive school climate • Determinants and importance of school climate • Meaning, types and principles of school-community relationship • The need for effective relationship between basic schools and the community • Ways to ensure effective relationship between basic schools and the community • Effective delegation and handling of conflict issues in inclusive primary schools. • Role of GES, SMC, PTA, GES, DEOC, MOE, NGOs in fostering cordial school-community partnership.	• Tutor-led discussion on meaning, types, determinants and importance of inclusive school climate. • Panel/pyramid discussion on meaning, types and principles of school-community relationship. • Individual and group power point presentations on the need for and ways to ensure effective relationship between inclusive primary schools and the community. • Audio-visual and tactile analysis of skills for effective delegation and handling of conflict issues in inclusive primary schools and the community. • Team teaching/Resource persons for Role of GES, SMC, PTA, GES, DEOC, MOE, NGOs in fostering cordial school-community relationship.
	7	Contemporary issues in primary school administration	• 21st Century teaching skills • Professional standards (National Teachers' Standards for Ghana), and Code of Ethics (e.g. sexual harassment and misconduct, child abuse, extortion of money from students, drug abuse, alcoholism), homosexuality, occultism, Gender and SEN issues • Licensing of teachers • Induction, professional development, and promotion of teachers	• Individual and group presentations on 21st Century teaching skills using power point. • Resource persons to talk on professional standards, code of ethics, gender and SEN issues, and licensing of teachers. • Panel/pyramid discussion, shower thoughts, individual and group presentations on induction, professional development and

				promotion of teachers in primary schools.
Course Assessment	**Component 1**: FORMATIVE (QUIZZES) Summary of Assessment Method: i. Quiz on the differences and similarities of administration and management; educational implications of the functions of administration and management (POSDCoRB); and the unique nature of administration of primary schools. ii. Quiz on meaning, types and characteristics of organisations; features of the primary school as a formal organisation; and the role of the headteacher in mobilising resources for effective administration of inclusive primary school. Core skills to be developed: independent thinking skills, critical thinking skills, honesty Weighting: 30% Assesses Learning Outcomes: CLO 1, CLO 2			
	Component 2: FORMATIVE ASSESSMENT (GROUP PRESENTATIONS) Summary of Assessment Method: i. Group power point presentations of the specific duties of the inclusive Primary School headteacher. ii. Group power point presentations of the schools of administrative thoughts and their educational implications. iii. Group power point presentations on meaning and nature of leadership and its application to the Primary School setting. (groups should present on different topics) Core skills to be developed: collaboration, critical thinking skills, personal development, research and communication skills, honesty, Weighting: 30% Assesses Learning Outcomes: CLO 1, CLO 3 and CLO 4			
	Component 3: SUMMATIVE ASSESSMENT (EXAMINATION) Summary of Assessment Method: End of Semester Examination Weighting: 40% Assesses Learning Outcomes: CLO 5, CLO 6 and CLO 7			
Teaching and learning resources	1. TESSA Online Educational Resources (www.tessafrica.net) 2. T-TEL Modules (www.t-tel.org). 3. Other Relevant Online Resources (www.Tess-india.net, www.oerafrica.org,www.futureLearn.com, www.telmooc.org, www.col.org, Khan academy) 4. The iBox (CENDLOS) 5. Audio-visuals and animations from YouTube 6. Audio-visuals and animations from YouTube **7.** Projectors and computers			

Required Text (Core)	Afful-Broni, A. (2006). *Theory and practice of educational leadership in Ghana.* Accra: Yamens Press. Amanchukwu, R. N., Stanley, G. J., &Ololube, N. P. (2015). A review of leadership theories, principles and styles and their relevance to educational management. *Management, 5 (1)*, 6-14.
Additional Reading List	Afful-Broni, A. (2008) *Principles and practice of time management*. Accra: Yamens Press. Achua, C. F., &Lussier, R. N. (2013). *Effective leadership*. Toronto: South-Western Cengage Learning. Armstrong, M. (2009). *Armstrong handbook of human resource management practice* (11th ed.). London: Kogan Page. Bush, T. (2012). *Theories of educational leadership and management* (4th ed.). London: SAGE. Bush, T. &Middlewood, D. (2006). *Management of people in education*. London: Paul Chapman Publishing Ltd. Dampson, D.G. (2015). *Educational leadership: Theory and practice*. Cape Coast: Edsam Publishers. Esia-Donkoh, K. (2014). Attaining educational and school goals: Duties of headteachers of public basic schools in Ghana. *Journal of Education and Practice, 5* (1), 64-72. ISSN 2222-288X (Online), ISSN 2222-1735 (Paper). URL: http://www.iiste.org. Ghana Education Service (2010). *Headteachers' handbook*. Accra: Ministry of Education. Ghana Education Service (2010). *School management committee handbook*. Accra: Ministry of Education. Hoy, W. K. &Miskel, C. G. (2012). *Educational administration: Theory, research and practice* (7th Ed.). New York: McGraw-Hill Book Company. Jones, J. (2008). *Management skills in schools: A resource for school leaders.* London: SAGE. McGuire, D. (2014). *Human resource development* (2nd ed.). London: Sage Publications. Mankoe, J. O. (2007). *Educational administration and management in Ghana* (2nd ed.). Kumasi: Payless. Northouse, P. G. (2012). *Introduction to leadership: Concept and practices.* Los Angeles: SAGE. Putti, J. M. (2012). *Management principles*. New Delhi: Macmillan Publishers India Ltd. Scott, S., &Bohlander, G. (2013). Managing human resources. Ohio: South-Western Cengage Learning. Sidhu, K. S. (2011). *School organization and administration*. New Delhi: Sterling Publishers Pvt. Ltd. Transforming Teacher Education and Learning (T-TEL) (2017). *National teachers' standards for Ghana: Guidelines*. Accra: Ministry of Education

Language and Literacy

CONTEXT

This course aids the Initial Teacher Education learners (ITE) in translating materials that are in English to aid the teaching and learning. This course is relevant as the ITE learner enters the programme with inadequate knowledge skills in translation.

Course Title	**Translation Practice**						
Course Code		**Course Level: 400**	**Credit value: 3**	**Semester: 2**			
Pre-requisite	**N/A**						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☐	**Seminars** ☒	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF, to be addressed)	This course introduces the student teacher to the techniques of translation. It exposes student teacher to the various theories of translation, types of translation, and the processes in translation. Student teacher will then have practice of translating different materials in the source language to the target language, and vice versa. The course will be taught by the following pedagogical mode: discussion, group/individual work presentation, classroom observation, school visits, brainstorming, and demonstration. The course will be assessed through examination, class assignments and presentations, checklist for learning outcomes, demonstration, peer assessment, project work, report on classroom observation, report on supervision by mentors/lecturers, portfolio, and class participation. The course is designed to meet the following NTS, NTECF, BSC, GLE expectations and requirements: (NTS 1a, b: 12), (NTS 2c: 13), (NTS 2e: 13), (NTS 2f: 13), (NTS 3e: 14), (NTS 3j: 14), (NTECF 3: 20), (NTECF 3: 29), and (NTECF 3: 25).						

Course Learning Outcomesincluding INDICATORS for each learning outcome.	**Learning Outcomes:** On successful completion of the course, student teacher will be able to:		**Indicators:**	
	1. demonstrate knowledge and skills in translating texts in a Ghanaian language. (NTS 2c: 13), (NTECF 3: 20).		• apply the skills in translating a given text from English to Ghanaian language or vice versa	
	2. demonstrate knowledge and skills in teaching comprehension & summary of Ghanaian language. (NTS 1a, f: 12), (NTS 2c, d: 13), (NTS 3a, e, f, g, i, j: 14). (NTS 2f:13), (NTECF 4: 42), (IEP 5: 11).		• apply their knowledge to teach translation. • to employ strategies that show individual diversity of the learners are considered	
Course Content	**Unit**	**Topic**	**Sub-topic (if any)**	**Suggested Teaching Leaning Activities**
		1. Concept of translation 2. Processes in translation 3. Kinds of translation	1. translation (theories, types, skills) 1. Literal versus Modified Literal translation 2. Unduly Free versus Idiomatic or Meaning-based translation.	• Class brainstorming on the concept of translation. • Class discussion on the processes of translation. Student teachers are taken through the step-by-step processes in translation. Student teachers actively participate in the process. • Class discussion on the kinds of translation. Student teachers are assigned the task of translating texts in groups. The grouping and selection of the leadership of the group should pay particular attention to SENs, gender, etc. issues.

		4. Translation of different materials	1. Translating from Ghanaian language to English and vice versa)	1. Class does an assignment and compare kinds of translation. The most appropriate kind of translation is discussed taking into consideration the background and diversities of the learners.
		5. Oral interpretations		1. Student teachers are assigned the task of translating texts in groups. The grouping and selection of the leadership of the group should pay particular attention to SENs, gender, etc. issues. Student teachers peer assess their works. 1. Student teachers watch video or listen to audio recordings of speech and they take turns in interpreting them. Student teachers peer assess each other's interpretation demonstration.
Course Assessment (Educative assessment of, for and as learning)	**Component 1**: COURSEWORK Summary of Assessment Method: 1. Examination: It will consist of 2 passages to be translated from a Ghanaian language into English, and vice versa. Weighting 20% 2. Assignments/class presentations: They will consist of 2 individual presentations and 2 group presentations. Weighting 20% **Total Weighting: 40%** Assesses Learning Outcomes:			

	1. Examinations: The examination will assess student teachers knowledge and skills in comprehending, summarizing, and translating texts. They will address CLOs: 1 & 2. 2. Assignment/class presentations: The assignments will assess the problem-solving skills and student teacher's ability to identify and perform assigned tasks in translation, and they will address CLOs: 1 & 2.
	Component 2: COURSEWORK Summary of Assessment Method: 1. Peer assessment: It will involve assessed presentations and works by other student teachers. Weighting 10% 2. Class participation: It will comprise records on student teachers' active participation in all class activities including contributions to lessons and class activities. 10 % 3. Demonstration: It will involve student teachers' ability to demonstrate enthusiastically their knowledge and skills in using the appropriate kind of translation for a text. Weighting 10% **Total Weighting: 30%** Assesses Learning Outcomes: 1. Peer assessment: It will assess student teacher's objective assessment of works by their colleagues, which will address CLOs 2. Class participation: It will assess student teachers' active participation in class in terms of contributions to lessons and class activities. This will address CLOs 1 & 2. 3. Demonstration: It will assess student teacher's ability to demonstrate enthusiastically their knowledge and skills in interpreting oral texts and translation of texts which addresses CLOs 1 & 2.
	Component 3: COURSEWORK Summary of Assessment Method: 1. Report: It will have two components: (i) written report on action research by student teachers. Weighting 15% (ii) report on supervision by mentors/lecturers. Weighting 5% 2. Professional Portfolio: It will consist of mentor's assessment comments, student teacher's presented works, report on learners' progress, personal journal, etc. Weighting 10% **Total Weighting: 30%** Assesses Learning Outcomes:

	1. Report: (i). Written report by Student teachers: It will assess student teacher's written report on an action research on the application of the knowledge and skills in translation teaching and learning. This addresses the CLO 1 & 2. (ii) Written report by mentors/lecturers: It will assess student teacher's observation, school visit activities, which address CLO 1 & 2. 2. Professional portfolio: It will assess student teacher's ability to organise himself or herself as s/he develops professionally. This will address CLOs 1 & 2.
Instructional Resources	1. Sound recorder 2. tactile materials for visual impairment purposes.
Required Text for all Ghanaian Languages:	Baker, M. (2005). *In other words.* London: Routledge. Baker, M. (Ed.). (1998).*Encyclopedia of Translation Studies*. London: Routledge. Bell, R. T. (1991). *Translation and Translating*. London: Longman Group Ltd. Munday, J. (2001). *Introducing Translation Studies*. London: Routledge.
1. Additional reading list for Ga	Bower, R. A. (Ed.). (1988). *On Translation.* Massachusetts: Harvard University Press. Crystal, D. (Ed). (1991). *Encyclopedia of Language*. Cambridge: Cambridge University Press. Duff, A. (1990). *Translation*. Oxford: Oxford University Press. Frawley, W. (1984). *Translation: Literary, Linguistics and philosophical perspectives.* London: Associated University Press. Halliday, M. A. K. (1990). *Discourse and the Translator*. London: Longman. Larson, M.L. (1992). *Meaning-Based Translation*: A Guide to cross Language Equivalence. Lanham: University Press of America. Nemark, P. (1988). *A Textbook of Translation*. London: Prentice Hall Regents. Nemark, P. (1981). *Approaches to Translation*. Oxford: Pergamon. Papegaaij, B. & Schubert, K. (1988). *Text Coherence in Translation*. Dordrecht: Foris. Toury, G. (Ed.). (1987). *Translation Across Cultures*. New Delhi: Bahri.
2. Additional reading list for Dangme	Bower, R. A. (Ed.). (1988). *On Translation*. Massachusetts: Harvard University Press. Duff, A. (1990). *Translation*. Oxford: Oxford University Press. Frawley, W. (1984). *Translation: Literary, Linguistics and philosophical perspectives.* London: Associated University Press. Halliday, M. A. K. (1990). *Discourse and the Translator*. London: Longman. Larson, M.L. (1992). *Meaning-Based Translation*: A Guide to cross Language Equivalence. Lanham: University Press of America. Nemark, P. (1988). *A Textbook of Translation*. London: Prentice Hall Regents.

	Nemark, P. (1981). *Approaches to Translation*. Oxford: Pergamon. Papegaaij, B. & Schubert, K. (1988). *Text Coherence in Translation*. Dordrecht: Foris. Toury, G. (Ed.). (1987). *Translation Across Cultures*. New Delhi: Bahri.
3. Additional reading list for Nzema	Bower, R. A. (Ed). (1988). *On translation.* Massachusetts: Harvard University Press. Crystal, D. (Ed). (1991). *Encyclopedia of Language*. Cambridge: Cambridge University Press. Duff, A. (1990). *Translation*. Oxford: Oxford University Press. Frawley, W. (1984). *Translation: Literary, Linguistics and philosophical perspectives.* London: Associated University Press. Hatim, B. & Munday, J. (2005). *Translation: An advanced resource book*. London: Routledge. Halliday, M.A.K. (1990). *Discourse and the Translator*. London: Longman. Wilson, R.F. (1980). *Writing, Analysis and Application*. Boston: Allyn & Bacon.
4. Additional reading list for Fante	Bower, R. A. (Ed). (1988). *On translation.* Massachusetts: Harvard University Press. Duff, A. (1990). *Translation*. Oxford: Oxford University Press. Frawley, W. (1984). *Translation: Literary, Linguistics and philosophical perspectives.* London: Associated University Press. Hatim, B. & Munday, J. (2005). *Translation: An advanced resource book*. London: Routledge. Halliday, M.A.K. (1990). *Discourse and the Translator*. London: Longman.
5. Additional reading list for Twi	Bower, R. A. (Ed). (1988). *On translation.* Massachusetts: Harvard University Press. Crystal, D. (Ed). (1991). *Encyclopedia of Language*. Cambridge: Cambridge University Press. Duff, A. (1990). *Translation*. Oxford: Oxford University Press. Frawley, W. (1984). *Translation: Literary, Linguistics and philosophical perspectives.* London: Associated University Press. Hatim, B. & Munday, J. (2005). *Translation: An advanced resource book*. London: Routledge. Halliday, M.A.K. (1990). *Discourse and the Translator*. London: Longman.
6. Additional reading list for Ewe	Atakpa, F.K. (2003). Gbe2a`u Na E3egbew4lawo: Accra: Wòeli Publishing Services. Larson, M. L. (1998).*Meaning-based Translation: A Guide to cross-language equivalence.*New York: University Press of America. Obianim S. J. (1969).*E3egbeŋuti Nunya Akpa Gb7t4.*Ho, E. P. C. Book Depot. Obianim S. J. (1960). *E3egbeŋuti Nunya Akpa Evelia*. London: William Clowes and Sons. Sowah, C. W. (2006). *Nyadug4mesese: Ada`u Siwo Le E`u*. Accra: Salt N Light
7. Additional reading list for Dagaare	Bower, R. A. (1998). *On Translation*. (Ed). Massachusetts: Harvard University Press. Duff, A. (1990). *Translation*. Oxford: Oxford Univ. Press. Larson, M.L. (1992). *Meaning-Based Translation*: A Guide to cross Language Equivalence. Lanham: University Press of America. Newmark, P. (1988). *A Textbook of Translation*. Oxford: Prentice Hall Regents.

	Newmark, P. (1981). *Approaches to Translation*. Oxford: Pergamon. Papegaaij, B. & Schubert, K. (1988). *Text Coherence in Translation*. Dordrecht: Foris. Tourey, G. (Ed.). (1987). *Translation across Cultures*. New Delhi: Bahri. WYCIFF Bible translators. (1977). *Notes on Translation*. No. 64.
8. Additional reading list for Kasem	Catford, J. C. (1994).*Linguistic Theory of Translation.* Edinburg University Press. Larson, M. (1998). *Meaning-Based Translation.* University Press of America
9. Additional reading list for Kusaal	Duff, A. (1990). *Translation*. Oxford University Press. Frawley, W. (1984). *Translation: Literary, Linguistics and philosophical perspectives.* London: Associated University Press. Hatim, B. & Munday, J. (2005). *Translation: An advanced resource book*. London: Routledge. Larson, M.L. (1992). *Meaning-Based Translation*: A Guide to cross Language Equivalence. Lanham: University Press of America. Newmark, P. (1988). *A Texbook of Translation.* London: Prentice Hall Regents. Papegaaij, B. & Schbert, K. (1988). *Text Coherence in Translation*. Dordrecht: Foris. Robinson, D. (2005). *Becoming a translator: An introduction to the theory and Practice of translation.* London: Routledge.
10. Additional reading list for Gurenɛ	Frawley, W. (1984). *Translation: Literary, Linguistics and philosophical perspectives.* London: Associated University Press. Hatim, B. & Munday, J. (2005). *Translation: An advanced resource book*. London: Routledge Hatim, B. and Mason, I. (1990). *Discourse and the Translator*. London: Longman Group. Larson, M.L. (1992). *Meaning-Based Translation* : A Guide to cross Language Equivalence. Lanham: University Press of America. Newmark, P. (1988). *A textbook of translation*. New Jersey: Prentice Hill Papegaaij, B. &Schbert, K. (1988). *Text Coherence in Translation*. Dordrecht: Foris. Robinson, D. (2005). *Becoming a translator: An introduction to the theory and Practice of translation.* London: Routledge Tury, G. (Ed.). (1987). *Translation Across Culture*. New Delhi: Bahri.
11. Additional reading list for Gonja	Bower, R.A. (Ed). (1988).*On translation.* Massachusetts: Harvard University Press. Cadroy, L.A. (2005). *Translating and Interpreting*. London: Longman Catford, J.C. (2004). *A linguistic Theory of Translation*. Oxford University Press. Duff, A. (1990).*Translation*. Oxford: Oxford University Press. Fraklinton, B. (2007). *Translations and Philosophy*. London: Associated University Press. Garcias, G. & Mason, B. (Eds) (2006). *Theory and Practice of Translation*. Berne: Peter Lang. Halliday, M.A.K. (1990). *Discourse and the Translator*. London: Longman. Hatim, B. & Munday, J. (2005). *Translation: An advanced resource book*. London: Routledge Hatim, B. and Mason, I. (1990). *Discourse and the Translator*. London: Longman Group.

	Larson, M.L. (1992). *Meaning-Based Translation*: A Guide to cross Language Equivalence. Lanham: University Press of America. Newlands, J.P. (2008) *A Manual of Translation*. New Jersey: Prentice Hall. Normanda, C. (2005) *The Theory and Practice of Translation*. Oxford: Oxford University Press. Papegaaij, B. & Schbert, K. (1988). *Text Coherence in Translation*. Dordrecht: Foris. Robinson, D. (2005). *Becoming a translator: An introduction to the theory and Practice of translation.* London: Routledge
12. Additional reading list for Dagbani	Bower, R.A. (Ed). (1988).*On translation.* Massachusetts: Harvard University Press. Frawley, W. (1984). *Translation: Literary, Linguistics and philosophical perspectives.* London: Associated University Press. Hatim, B. & Munday, J. (2005). *Translation: An advanced resource book*. London: Routledge Halliday, M.A.K. (1990). *Discourse and the Translator*. London: Longman. Larson, M.L. (1992). *Meaning-Based Translation*: A Guide to cross Language Equivalence. Lanham: University Press of America. Newmark, P. (1988). *A Texbook of Translation.* London: Prentice Hall Regents. Papegaaij, B. & Schbert, K. (1988). *Text Coherence in Translation*. Dordrecht: Foris. Robinson, D. (2005). *Becoming a translator: An introduction to the theory and Practice of translation.* London: Routledge. Tury, G. (Ed.). (1987). *Translation Across Culture*. New Delhi: Bahri.

Supported teaching in School

CONTEXT

Supported teaching in schools (STS) in year four (4) needs to consider planning, placement and classroom practice of the student-teacher in the following context which are likely to impact on the effectiveness of placement and practice:

1 Student-teachers often lack knowledge about cultural practices of some of the communities where they are placed.
2 Student-teachers are not adequately equipped to handle issues on ICT integration, equity and inclusivity as well as differentiated learning.
3 Portfolio assessment, which provides evidence of student-teachers' practice is not included in their overall assessment which focuses on exams.
4 Knowledge of reflective practice and classroom enquiry is not well developed among student-teachers, mentors, and tutors etc.
5 Mentors, supervisors and lead mentors are inadequately prepared to support student-teachers.

COURSE WRITING SPECIFICATION

Course Title	**STS: Extending Teaching II (Post Internship Seminar)**						
Course Code		**Course Level: 400**	**Credit value: 3**	**Semester 2**			
Pre-requisite	• **STS: Extending Teaching 1**						
Course Delivery Modes	**Face-to-face√**	**Practical Activity**	**Work-Based Learning**	**Seminars**	**Independent Study**	**e-learning opportunities**	**Practicum**
Course Description	This course is a school-based component of the teacher education programme that equips student-teachers with the needed skills to complete building their professional teaching portfolio which they started in Year one and also set targets for their lifelong learning. The course aims at equipping student-teachers with the skills to critically reflect on their teaching experiences throughout their training programme and demonstrate how their experiences have helped them to acquire the qualities and attributes expected of good teachers to fully meet the NTS. In addition, the experience gives them the opportunity to gain a comprehensive understanding of the basic school curriculum. The course will further equip student-teachers with additional leadership skills needed to function effectively in their schools and wider school communities as effective teachers required by law and their professional practice as prescribed by the NTS. Finally, this course will give student-teachers the opportunity to improve upon their presentation skills through the post-intervention seminars.						

	Assessment of the course will be by expert evaluation and feedback from tutors during the post-intervention seminars and presentations of their professional teaching portfolios, SRJs and the reports of their action research which is their project work (NTS, 1b, 1c, 1d, & 2b). The course value is three (3) credit hours.	
Course Learning Outcomes	**OUTCOMES** **Upon completion of the course, student-teachers will be able to**:	**INDICATORS**
	CLO 1. Demonstrate skills in critical reflection on they are meeting the NTS in full and identify targets for further development as reflective practitioners (NTS, 1a)	• Show recorded reflections in completed SRJ • Provide checklist of NTS achievement plan agreed upon with and monitored by mentor • Show a plan of targets set for further development as reflective practitioners.
	CLO 2. Demonstrate the qualities and attributes expected of a good teacher that fully meets the National Teachers' Standards (NTS) (NTS, 1c)	• Show completed SRJ showing comments from mentor and tutor about achieved attributes of a good teacher that meet fully the NTS.
	CLO 3. Complete professional teaching portfolio (NTS, 1b)	• Produce completed professional teaching portfolio using appropriate ICT to design. • Produce completed professional teaching portfolio showing artefacts & exhibits
	CLO 4. Set targets for lifelong learning and development as reflective practitioners (NTS, 1b)	• Show records of sets target for lifelong learning based on post-intervention discussions, (peers, mentor, faculty), teacher evaluation and action research reports. • Provide reports on targets identified and set as discussed with tutor to be areas for development to meet the requirements of a good teacher.
	CLO 5. Demonstrate comprehensive skills in critical reflection on upper primary class teaching, wider school observation as recorded in students' reflective journal and how it will help them meet the NTS (NTS, 1d, 2b)	• Provide updated records in SRJ based on experiences gained over the period of training emphasizing attainments of the NTS.

Course Content	Units	Topic	Sub-topics (if any)	Teaching and Learning Activities (strategies) to achieve learning outcomes:
	1	**Reflective Practitioner**	Reflections on NTS attainment Set targets for further development	• Group discussions/brainstorm among peers to assess indicators of the NTS • Employ individual self-evaluation exercises to assess the extent of attainment of all NTS indicators • Discuss progress evaluations with tutor/peers and receive feedback • Discuss gaps/limitations with tutors and set targets for further development and attainment of the NTS • Outline of plans to continue the development of the NTS indicators and copies kept in teaching portfolio.
	2	**NTS and a 'Good Teacher'**	**Qualities and attributes of a good upper primary teacher according to the NTS**	• Use concept mapping to develop a chat of the qualities and attributes of a 'good' upper primary teacher • Assess the progress of attainment of qualities and attributes of a good upper primary teacher from tutors & peers reviews • Discuss the key components of the NTS and its indicators • Discuss and Pair-share with peers and tutors, leadership qualities observed during wider school life and how the qualities would impact their professional practices as stated in the NTS. • Individuals make presentations to tutors
	3	**Professional teaching portfolio**	Final development of the teaching portfolio	• Use appropriate ICT/Media tools to complete building the professional teaching portfolio • Prepare an all-inclusive presentation of the developed professional teaching portfolio

				• Collect feedback from tutors and peers after presentation
	4	**Set targets for lifelong learning**	Developmental processes of a Reflective Practitioner	• Design an action plan with timelines to set personal and professional targets for future development and progression against the Teachers' standards. • Group/individual presentations to highlight action plans for personal and professional growth in terms of e.g. content and pedagogical knowledge • Student-teachers to identify potential CPD activities for further learning. • Student-teachers identify possible sources of funding for their developmental training.
	5	**Reflections on upper primary classroom teaching & wider school life**	Continuous reflections on upper primary classroom and wider school life experiences to inform practice.	• In groups or whole class discussions/seminar, student-teachers recall experiences from upper primary classroom teaching and learning and lessons/challenges learned from them. • At seminars or whole class discussions, student-teachers recall experiences gained from participating in wider school life activities such as: staff, PTA, SMC meetings, morning and closing assemblies, co-curricular activities, CPD training etc. They recount lessons and challenges learned from them and how their future will be informed by those lessons learned.
	Component 1: PROFESSIONAL TEACHING PORTFOLIO/E-PORTFOLIO (NTS, 1a, 1e, & 1f) **Summary of Assessment Method**: Tutors' evaluation of portfolio contents and giving feedback. [e.g. post-STS seminars and presentations of future professional plans, completed SRJ, action research (project work) report, action plans for lifelong learning and targets set, field notes from wider school life observation and other achievements, artefacts, best lesson plans, learners' marked exercises, test instruments developed with their marking schemes etc.			

	This is assessment of learning and as learning Weighting: 100 % **Assesses Learning Outcomes:** Completed professional teaching portfolio (CLO, 1, 2, 3, 4, & 5)
	Component 2: Action Research (NTS, 3b) **Summary of Assessment Method**: Evaluation of a written action research report adhering to the rubrics and criteria which may include: • Introduction/Background • Review of related literature • Methodology/intervention • Linking findings to improvement in Practice • Conclusion This is assessment of learning and assessment as learning Weighting: 100 % **Assesses Learning Outcomes:** Completed action research as project work to support children's learning
Instructional materials	Computers, projectors, other resources for seminars and presentations • Videos/audio visual/tactile analysis of Classroom teaching & learning • Samples of classroom observation checklists (braille and written) • Samples of professional teaching portfolios • Samples of reflective log/SRJ • Samples of good/bad lesson plans • Samples of Staff/SMC/PTA meeting notes • Tutor professional development handbook • Samples of feedback instruments •
Required Text (Core)	Norton, L.S. (2009). *Action research in teaching and learning*. New York: Routledge.
Additional Reading List	Consult existing Teaching Practice Handbooks from Universities and Colleges of Education T-TEL materials from www.t-tel.org TESSA materials from www.tessafrica.org McIntosh, P. (2010). *Action research and reflective practice: Creative and visual methods to facilitate reflection and learning.* London: Routledge.

CONTEXT

There is lack of interest and reading which negatively affects the teaching and the learning of the written literature of language, and also ability of the ITE learners to apply the knowledge to be acquired in appreciating genres of literature. Some of the Ghanaian languages do not have enough written literature for study and analysis.

Course Title	**Written Literature of a Ghanaian Language**						
Course Code		**Course Level: 300**	**Credit value: 3**	**Semester: 1**			
Pre-requisite	**Oral Literature**						
Course Delivery Modes	**Face-to-face** ☒	**Practical Activity** ☒	**Work-Based Learning** ☐	**Seminars** ☐	**Independent Study** ☒	**e-learning opportunities** ☒	**Practicum** ☐
Course Description for significant learning (indicate NTS, NTECF to be addressed)	This course introduces the student teacher to the written literary materials of a Ghanaian language. The course will comprise the study of literary works of Ghanaian Language from a literary critical perspective, paying attention to the cultural underpinnings of the works. It aims at assisting student teachers to appreciate the form of written literature in the various genres – prose, drama and poetry. The course is intended to stimulate student teachers' reading of texts in order to develop the rudiments of critical analysis in various forms, contexts and style. It intends to also help student teacher identify the use of literary devices in given texts. Two books will be selected for each of the three genres, namely prose, drama and poetry. Areas to cover include the scope, characteristics of the genres. The analysis will include appreciation of the books and discovering issues such as themes and literary devices in the genre as well as types of the prose, drama and poetry. The following pedagogical modes will be used in teaching the course: discussion, group/individual work presentation, classroom observation/ school visits, brainstorming, and demonstration/dramatization. These modes will pay particular attention to learners' diversity and backgrounds. The course will be assessed through examination, class assignments and presentations, checklist for learning outcomes, demonstration, peer assessment, project work, report on classroom observation, report on supervision by mentors/lecturers, portfolio, and class participation. The course is designed to meet the following NTS, NTECF, BSC, GLE expectations and requirements: (NTS 1a, b: 12), (NTS 2c: 13), (NTS 2e: 13), (NTS 2f: 13), (NTS 3e: 14), (NTS 3j: 14),(NTS 3k:4), (NTECF 3: 20), (NTECF 3: 29), and (NTECF 3: 25).						

Course Learning Outcomes including Indicators for each learning outcome.	**Learning Outcomes** On successful completion of the course, student teachers will be able to:	**Indicators**
	1. demonstrate knowledge and understanding of written literature of a Ghanaian language, and teach them effectively and promote literature appreciation among learners. (NTS 2c, e: 13), (NTS 2e: 13), (NTS 3a, c: 14), (NTECF 3: 20).	• identify the genre of written literature of a Ghanaian language • explain each genre of the written literature of a Ghanaian language • Students should be able to appreciate written literature of a Ghanaian language in learning
	2. demonstrate knowledge, understanding and skills in the use technology to teach written literature effectively to enhance learners' Ghanaian language learning. (NTS 3j:14)(NTS 2d:13), (NTECF 4:45), (NTS 1d: 12), (NTS 2d:13), (NTS 3e: 14), (NTECF 3: 26), (NTECF 5:59).	• select appropriate technological tools for literature (audio-visual/tactile and manipulative), and appreciate art in written form. • apply their knowledge in the use of technological tools to teach written literature of a Ghanaian language
	3. demonstrate knowledge and skill in teaching written literature of a Ghanaian language. (NTS 1c,e: 12), (NTS 3h:14), (NTS 3e:14), (NTS 3f,g: 14), (NTECF 4: 39), (IEP 5.1.1.1.a: 11).	• teach the genres of literature (prose, drama and poetry) using the appropriate teaching learning materials. • employ variety of appropriate instructional strategies to enhance learners' critical thinking and participation • factor in learners' diversity in teaching and learning
	4. demonstrate knowledge and skill in assessing the various genres of written literature of a Ghanaian language	• design and implement a variety of assessment mode for teaching and learning written literature (NTS 1d, g: 12), (NTS 3b: 14). • identify and assist learners with difficulties in their assessment (NTS 1a, b: 12), (NTS 3k-p: 14), (NTECF 4: 39) • 4.3. provide evidence of tracking learners' progress (NTS 3n, p:14)

	5. demonstrate knowledge and skill in assessing the various genres of written literature of a Ghanaian language. (NTS 1d, g: 12), (NTS 3b: 14), (NTS 1a, b: 12), (NTS 3k-p: 14), (NTECF 4: 39), (NTS 3n, p: 14).			• design and implement a variety of assessment mode for teaching and learning written literature • identify and assist learners with difficulties in their assessment • 5.3 provide evidence of tracking learners' progress
	6. demonstrate knowledge and skills in the preparation of appropriate level teaching and learning materials to teach Ghanaian language written literature. (NTS 3j: 14), (NTS 2f:13), (NTS 1g), (NTECF 3: 29), (NTS 3f, g, h: 14), (NTECF 4: 39),(NTECF 4:43).			• design and select various appropriate teaching and learning resources suitable for the levels in classroom • 6.2. use appropriate teaching materials to cater for learners with different backgrounds
	7. Interpret and understand key features of the Ghanaian language written literature curriculum and plan lessons from it. (NTS 2a, b, d: 13), (NTECF 3: 20), (NTS 2f:13),(NTS 3a,g:14) (NTECF 4: 42).			• show their awareness of the existing learning outcomes of learners • factor in individual learner's diversity in planning and delivering lessons
	8. undertake small-scale action research in the Ghanaian language focusing on learners' learning and progress, and to reflect on and develop their teaching. (NTS 1d, g: 12), (NTS 3b: 14), (NTS 1a, b: 12), (NTECF 4: 39).			• design and undertake a small-scale action research to improve teaching and learning of written literature • reflect on and demonstrate progress in their professional development
Course Content	**Units:**	**Topics:**	**Sub-topics (if any):**	**Suggested Teaching Learning Activities:**
	1.	Types of Literature	Literature (concept, scope, types, characteristics)	• Student teachers discuss the concept of literature. Attentive listening/watching of stage performances/ movies by students paying particular attention to students SENs, gender, etc. issues. • Student teachers discuss contents of stage performances/video recordings paying particular attention to students SENs, gender, etc. issues. • Student teachers discuss the genre/ type of the performances bringing out the characteristics, elements and literary devices.

	2.	Written literature (prose, drama, poetry) language	1. Prose (scope, characteristics, devices) 2. Drama (features) 3.Poetry(types and elements)	Individual/group presentation of assigned tasks on genres of written literature. • Attentive listening to prose (novels) by student teachers paying particular attention to students SENs, gender, etc. issues • Student teachers do reading of prose and critically discuss contents paying particular attention to students SENs, gender, etc. issues. • Student teachers summarise a written prose bringing out the themes which develop their summary skills as an assigned task. • Individual/group presentation of assigned tasks on characteristics and style of prose. The groupings and the selection of the leaders of the group should pay particular attention to communication issues such as SENs, gender, mixed abilities, inclusivity, equity, etc. • Student teachers watch a short play and discuss the performance and appreciate it.Student teachers discuss and identify the diction used such as proverbs and idioms. Student teachers are assigned the task of appreciating and identifying the literary devices employed in the performance and the types of drama. Student teachers perform a written play/type and students peer assess the performance. • Student teachers reflect on their previous knowledge on rhymes learnt in nursery schools. Student teachers discuss the style of the rhymes and appreciate them and do an assignment on the elements and features of poetry.

				• Group performance of poetry assigned and class assess. The groupings and the selection of the leaders of the group should pay particular attention to communication issues such as SENs, gender, mixed abilities, inclusivity, equity, etc.
	3.	Preparing TLMs for teaching written literature of a Ghanaian language	1. Selecting, designing and using of TLMs for teaching and learning written literature of a Ghanaian language 2. Selection and use of textbooks as TLMs for teaching and learning the written literature of a Ghanaian language	• Student teachers actively participate in designing TLMs for appropriate classes. Individual/group student teachers demonstrate the use of TLMs for appropriate levels. The groupings and the selection of the leaders of the group should pay particular attention to communication issues such as SENs, gender, mixed abilities, inclusivity, equity, etc. • Student teachers demonstrate the use of various TLMs for teaching in class. Student teachers peer assess their own choices of textbooks as TLMs for various levels
	4.	Interpreting the written literature of a Ghanaian language component of the Ghanaian language curriculum		Student teachers reflect on their personal experiences in learning written literature of a Ghanaian language. Student teachers discuss the component of the curriculum. Group presentations based on interpreting the component of the curriculum. The groupings and the selection of the leaders of the group should pay particular attention to communication issues such as SENs, gender, mixed abilities, inclusivity, equity, etc.
	5.	Methods of teaching the written literature of a Ghanaian language		1. Class discusses the methods of teaching written literature of a Ghanaian language. Student teachers do demonstration teaching using the appropriate methods in teaching an aspect of written literature of a Ghanaian language. Student teachers peer assess their own teaching demonstrations.
	6.	Preparation of a	1. Factors to	1. Student teachers discuss the factors that are considered

		written literature lesson (learning) plan	consider when designing a written literature lesson plan 2. Components of a written literature lesson plan	in designing lesson plan for Ghanaian language literature. Group presentations on designing various components of the written literature lesson plan. The groupings and the selection of the leaders of the group should pay particular attention to communication issues such as SENs, gender, mixed abilities, inclusivity, equity, etc. Student teachers do peer assess their own class presentations Demonstration by student teachers on how to use a lesson plan to teach literature in class. Student teachers peer assess their own teaching.
Course Assessment (Educative assessment of, for and as learning)	**Component 1**: COURSEWORK Summary of Assessment Method: 1. Examination (for diagnostic purposes): It will comprise supply tests such as fill-ins. Weighting 20% 2. Assignments: It will consist of one assignment on each of the three genres. Weighting 20% **Total Weighting: 40%** Assesses Learning Outcomes: 1. Examinations (for diagnostic purposes): The examination will assess student teachers against the following CLOs: 1, 3 & 4. 2. Assignment: The assignments will assess the problem-solving skills and student's ability to identify themes, summarise and appreciate written literature, and will address CLOs: 2, 4, & 5.			
	Component 2: COURSEWORK Summary of Assessment Method: 1. Class participation: It will comprise records on students' active participation in class in terms of contributions to lessons and class activities. 20 % 2. Dramatization: It will involve student teacher's ability to demonstrate enthusiastically their knowledge and skills in a performance. Weighting 10% **Total Weighting: 30%** Assesses Learning Outcomes: 1. Class participation: It will assess student teacher's active participation in class in terms of contributions to lessons and class activities. This will address CLOs 1, 2, 3, 4, 5, & 6. 2. Dramatization: It will assess student teacher's ability to demonstrate enthusiastically their knowledge and skills in using the appropriate diction and style of the genres and types of the genre, which addresses CLOs 2, 3, & 4.			

	Component 3: COURSEWORK Summary of Assessment Method: 1. Report: It will comprise two components: (i) written report on small-scale action research by student teacher. Weighting 15% (ii) report on supervision by mentors/lecturers. Weighting 5% 2. Professional Portfolio: It will consist of mentor's assessment comments, student teacher's presented works, checklist for learning outcomes. Weighting 10% **Total Weighting: 30%** Assesses Learning Outcomes: 1. Report: (i). Written report by student teacher: It will assess student teacher'swritten report on a small-scale research on written literature of a Ghanaian language in teaching and learning. This addresses the CLO 6 & 7. (ii) Written report by mentors/lecturers: It will assess student teacher's observation activities, which addresses CLO 3, 4, 5, 6 & 7. 2. Professional portfolio: It will assess student teacher's ability to organise himself or herself as s/he develops professionally. This will address CLOs 2, 3, 4, 5, 6 & 7.
Instructional Resources	1. LCD Projector 2. recorded video clips on performances 3. language laboratory
Required Text (Core) Ghanaian Languages	Agyekum, K. (2013). *Introduction to literature*. Accra: Adwinsa Publishers. Cadden, J. (1986). *Prose appreciation for 'A' Level*. London: Hodder & Stoughton. Kearns, G. (1987). *Appreciating literature*. Glencoe: Macmillan. Krampah, D. E. (1979*). Helping with literature*. Tema: Ghana Publishing Corporation. Meyer, M. (2010). *Bedford introduction to literature*: *Reading, thinking, writing.* Bedford/St.Martin's. Peck, J. & Coyle, M. (1993). *How to study literature*. London: Macmillan Press. Scribuer, L. (1989). *Enjoying literature*. Glencoe: Macmillan.

Additional reading list for Ga	Afful-Boachie, M. (2006). *Poetry appreciation*. Accra: Mutaz Printing Works. Cadden, J. (1996). *Prose appreciation for 'A' Level*. London: Hodder & Stoughton. Senanu, R. E. & Vincent, T. (1988). *A Selection of African Poetry*. London: Longman.
Additional reading list for Dangme	Adetuyi, V. T. (1972). *Notes on West African Verse*. Ibadan: Oniboneje Press. Asante, A. L. (1982). *Ke Mawu Gbi Mo ɔ*. Accra: Bureau of Ghana Languages. Atteh, E.T. (2004). *Nyansa Kpɛɛ*. Dansoman: Salt N'Light. Kubi, G.A.N. (1980). *Nyɛ Ko Pee Ye Ya*. Accra: Bureau of Ghana Languages. Kubi, G.A.N. & Torgbenu, M. N. (1992). *Ma Waa Je*. Olaga: Dangme Education Publishers. Nanor, J. B. (1975). *Matsɛ amyɛnɔgu*. Accra: Bureau of Ghana Languages. Nanor, J. B. (1978). *Mawu Be Ji Be*. Accra: Bureau of Ghana Languages.
Additional reading list for Nzema	Armo Kangah, A. P. (2013). *Euzozoa Mese Me Ne* .Accra: Bureau of Ghana Languages. Anilima, A. (2013). *Ama Kodwo*. Accra: Bureau of Ghana Languages Blay, S.K. (2013). *ɔdi ye kɛlɛma nzi*. Accra: Bureau of African Languages. Caroli, D. (1990). *Chinua Achebe: Novelist, Poet, Critic*. London: Edward Arnold. Kwaw, F.E. (2008). *Meka Bie*. Accra: Paul Unique Printing Works. Kwaw, F.E. (2008).*Adwoba Ehwia*. Accra: Paul Unique Printing Works Senanu, R. E. & Vincent, T. (1988*). A Selectionof African Poetry.* London: Longman. Soboh-Blay, A. (2013).*Nyamenle Asa ɛnlomboɛ.* Accra: Bureau of Ghana Languages Soboh-Blay, A. (1997). *Awie ɛnze Awieleɛ.* Accra: Bureau ofGhana Languages
Additional reading list for Fante	Annobil, J. A. (1957). *Abotar, Mbo-Na-Yɛ, Mfantse Ebirɛmpɔn,* Nana Bosompo. Cape Coast: Methodist BookDepot. Caroli, D. (1990). *Chinua Achebe: Novelist, Poet, Critic*. London: Edward Arnold. Crayner:J. B. (1957) *Bɔrbɔr Kunkumfi,Akweesi Egu Nananom Pɔw.* Cape Coast: Methodist BookDepot. Gaddiel R. & Acquaah: (1960) *Oguaa Aban*. Cape Coast: Methodist Book Depot. Longdon,J. E. (1972). *Samansew A, EkuayɔPa*. Cape Coast: Mfantseman Press. Mayhead, R. (1985*). Understanding literature*. Cambridge: Cambridge University Press. Senanu, R. E. & Vincent, T. (1988*). A selection of African poetry.* London: Longman.
Additional reading list for Twi	Adi, K. (1989). *Mewɔ Bi Ka: Anwensɛm*. Accra: Bureau of Ghana Languages Amoako, B. O. (1994). *Ɛnnɛ nso bio*. Accra: Bureau of Ghana Languages. Caroli, D. (1990). *Chinua Achebe: Novelist, Poet, Critic*. London: Edward Arnold. Koranteng, E. O. (2007). *Guasohantan: Agoru Bi*. Accra: Bureau of Ghana Languages Senanu, R. E. & Vincent, T. (1988*). A Selectionof african poetry.* London: Longman.

	Styan, J. L. (1975). *Elements of drama*. Cambridge: Cambridge University Press.
Additional reading list for Ewe	Akafia, S. Y. (1993). *Ku le Xɔme*. Accra: Bureau of Ghana Languages. Bi*ɖ* i-Setsofia, H. K. (1989). *Tɔgbui Kpeglo II*. Accra: Bureau of Ghana Languages. Fiawo, F. K. (1981). *Tɔkɔ Atɔlia.Accra*: Sedco Publishing Limited. Hinidza, R. K. (1970). *Henɔwo fe gbe*. Accra: Bureau of Ghana Languages. Nutsuako, K. (1975).*Eʋe Hakpanyawo Akpa Gatɔ.* Tema: Ghana Publishing Corporation Obianim, S. J. (1995).*Amegbetɔa alo Agbezuge feŋutinya.* Accra: Sedco Publishing Limited. Reiss, E.J. (1977). *Elements of Literary Analysis*. Accra: The World Publishing Company
Additional reading list for Dagaare	Adetuyi, V. T. (1972). *Notes on West African Verse*. Ibadon: Oniboneje Press Ali, M. K. K. (2004) *Paryeli*. Accra: SALT'N LIGHT. Ali, M. K. K. (2012). *Fo Baŋ Ka Wola.* Accra: SALT'N LIGHT. Diyanni, R. (2004). *Literature; Approaches to Fiction, Poetry and Drama.* New York: McGraw-Hill. Sanortey, T.D (2013). The Literary Devices in Birifor Kɔntɔmbɔɔre (Festival) Songs.*Journal of African Languages and Culture.* 2(1).121-131. Sanortey, T.D. (2012). The Aesthetics of Kɔntɔmbɔɔr (Birifor Festival) Songs." M.Phil. Thesis. University of Education, Winneba. Ɔrefang, B. N.G.M. (1995). *Dagaare Yelkaama* 1. Accra: Bureau of Ghana Languages. Ɔrefang, B. N.G.M. (1995). *Dagaare Yelkaama* 2. Accra: Bureau of Ghana Languages.
Additional reading list for Kasem	Abraham, M. A. (1981). *A Glossary of Literary Terms.* Dans. Norton Itcaca. New York. Danti, A. L. (2015). *Teena Gɛɛre.* Winneba*:* De-Misk. Danti, A. L. (2009). *Lei de Seina Taana.* Winneba: De-Miska. Ekeh, S. (2012). *Literature in Scope. Tema:* Kindeb Printing Press. Puruseh, M. (2013). *Taa Wuu Tera.* Winneba*:* De-Miska.
Additional reading list for Kusaal	Caroli, D. (1990). *Chinua Achebe: Novelist, poet, critic*. London: Edward Arnold. Senanu, R. E. & Vincent, T. (1988*). A Selection of African poetry*. London: Longman. Styan, J. L. (1975). *Elements of drama*. Cambridge: Cambridge University Press.
Additional reading list for Gurenɛ	Caroli, D. (1990). *Chinua Achebe: Novelist, poet, critic*. London: Edward Arnold. Senanu, R. E. & Vincent, T. (1988*). A selectionof African poetry*. London: Longman. Styan, J. L. (1975). *Elements of drama*. Cambridge: Cambridge University Press.
Additional reading list for Gonja	Afari- Twako, H. K. (2006).*Ngbanya be Atande*. Accra: SEDCO Publishers. Aenyi. W. T. (1972). *Notes on West Afican Verse* Ibadan: Onibonjee Press Braimah, J.A (1962). *Gonja Drums. Accra:* Bureau Of Ghana Languages. Mahama, M.M. (1973). *Gbɛadese* Accra: Bureau Of Ghana Languages.
Additional reading list	Abdulai, A. I. (1994). *Yɛm Salim Para*. Accra: Bureau of Ghana Languages.

for Dagbani	Adam, P. P. (2015). *Wuni Bimbirili*. Koforidua: Dagbani Unit of Gur-Gonja Department, UEW. Adetuyi, V. T. (1972). *Notes on West African Verse.* Ibadon: Oniboneje Press. Bawa, A. S. (2013). Amina. Koforidua: Dagbani Unit of Gur-Gonja Department, UEW. Caroli, D. (1990). *Chinua Achebe: Novelist, poet, critic*. London: Edward Arnold. Senanu, R. E. & Vincent, T. (1988). A selectionof African poetry. London: Longman. Styan, J. L. (1975). Elements of drama. Cambridge: Cambridge University Press.

Appendixes

Appendix I. A Rationale for the Specialism Programmes

The B.Ed. degree is made up of three specialism programmes: Early Grade Education (Kindergarten to Primary Three), Upper Primary Education (Primary Four to Six) and JHS Education.

The decision to design the B.Ed. around specialism pathway programmes is founded in the NTECF and the NTS. Each of the programmes is written to support achieving the overarching vision for the NTECF and to enable all student teachers to meet the NTS.

> *Specialism pathways are the key to depth and breadth of knowledge of what is to be taught, to connecting with the developmental level of children and to consolidating content knowledge. (NTECF P.9)*

The NTS also assumes that student teachers will receive age specific training

> *Student teachers will need to be assessed as appropriate to the specific context and circumstances they are in and for the level of learners they are to teach, for example, for children in pre-school, or for young people needing specialist knowledge at junior high school. (NTS P.6)*

The NTECF presents the following arguments for including specialisms in the ITE curriculum

- To ensure student teachers achieve the distinct knowledge and practice associated with specialisms as well as an overarching understanding across specialisms.

  For more than a decade, the training of teachers in the teacher training institutions has focused onthe training of generalist teachers for the basic level of education, stretching from early childhood to primary and even junior high school. The recognition of the need for specially qualified teachers for primary education is an area of neglect in the teacher-training curriculum. This also stems from the lack of recognition by policy makers that early childhood education, primary education and junior secondary education are distinct areas of knowledge with their own specialist concerns, concepts, praxis and methodological perspectives. It is important that these different levels are strengthened as distinct but integrated discourses. (NTECF P.50)

- There is a precedent, sited in the NTECF, in the current system for specialism training

However, more recently eight colleges have been allowed by the Ministry of Education to train early childhood teachers, while fifteen have been designated as science and mathematics colleges to prepare teachers for the JHS, thus allowing some flexibility in specialisation. Universities with teacher education faculties are offering early childhood education for those teaching 4 to 5-year olds in kindergarten. They also offer programmes that prepare teachers for primary, JHS and SHS. (NTECF P.50)

- The positive impact of specialisation on student teachers and importance of ensuring they understand expectations for learning and pedagogies before and beyond their specialisms

Specialism will not only help with the connection with the developmental level of children but will also help consolidate content knowledge within predefined levels. It will also allow for a deep concentration of content knowledge within the level of specialism, provide opportunities to experience and practice teaching within a narrow-predefined level, match student's interest with the specialised areas of the curriculum, and enable student teachers to understand expectations of learning for a smooth transition before and beyond their specialism. Students specialising in upper primary teaching will learn to use pedagogies that will ensure a smooth transition from upper primary to JHS 1 and KG to P3. Students' teaching in KG1-P3 will utilise pedagogies that will ensure smooth transition from this level to upper primary. (NTECF P.50)

- Based on this the NTECF makes the following recommendation

It is recommended therefore that four levels of specialism should exist in basic education: early grade level (KG-P3), Upper Primary (P4-P6), JHS and then SHS level. (NTECF P.50)

Beyond the NTECF and NTS there are further compelling arguments for specialisms in ITE. The Education Sector Analysis on System Capacity (ESA) in Ghana, 2018, recognized the need for specialised ITE curricular to be developed.

Teachers for the basic school level are currently not trained as specialists able to address the varying needs of learners at the different levels of pre-tertiary education (ESA P.16)

And that:

The same training was administered to all teachers from KG to JHS, with a lack of content knowledge specific to level (ESA P.63)

In this specialism was perceived as a mechanism for building both capacity and quality in the education system.

The report noted in terms of the reform of ITE:

The new structure changes the teacher training to four years of more specialised content appropriate to the grade level they are teaching, after which teacher will receive a degree. (ESA P.63)

Finally, the report stated regarding the reform of teacher education:

Ensuring that the teacher education curriculum is properly aligned with the Basic Education curriculum …… is critical to ensuring that geographical inequities in the spread of resources are addressed. (ESA P.64)

How specialism is developed in the B.Ed.

The specialisms are presented in the B.Ed. as discreet programmes with their own goals, learning outcomes and courses, however, as per the NTECF guidance, there is significant common ground to ensure that student teachers have both depth and breadth of knowledge to teach their specialism area and a wider understanding of subject knowledge, teaching and progress in learning across, before and beyond their specialism. This is achieved in several ways.

The first year is a foundation year for all student teachers. It: supports the transition from school to college; introduces the key principles and practices of the subjects and learning areas required to enable student teachers to become effective teachers; looks at the nature and core knowledge of subjects; introduces and locates the cross cutting issues including equity and inclusivity in education, introduces the school curriculum and approaches to teaching and learning and expectations for the learning and progress of pupils in different subjects.

These aspects of first year training are woven around clinical or school-embedded practice throughout the preparation, covering course work and laboratory-based experiences. Thus for example, student teachers' practice is directly linked to the National Teachers' Standards and the Basic School Curriculum; and the evaluation of student teachers must relate to students' outcome data such as student teacher artifacts, portfolios, formative and summative assessments, data from observation of student teachers' classroom skills by university/COE faculty and mentors. It means student teachers will be able to locate their specialism within the wider curriculum.

The specialism is introduced in year two and continues through to the end of year four. All subjects and learning areas share core content across programmes and there is an opportunity for students to work in opposing specialisms during year four school placement. Thus achieving depth of knowledge in a specialism and breadth of knowledge across specialisms.

Appendix II. Documents Consulted to support Curriculum Writing through the Curriculum Writing Guide

American Psychological Association (2014) *Assessing and Evaluating Teacher Preparation Programs.* Washington American Psychological Association

Biggs, J.B. (2003). *Teaching for quality learning at university*. Buckingham: Open University Press/Society for Research into Higher Education. (Second edition)

Fink, LD (2003) *Self-Directed Guide to Designing Courses for Significant Learning*. San Francisco Josey-Bass

Fink, LD (2003) *Creating Significant Learning Experiences: an integrated approach to designing college courses*. San Francisco Josey-Bass

Fullen, Michael (2011) *Change Leader: Learning to Do What Matters Most*. London Preview Books

Ministry of Education (MoE) (2015) *Inclusive Education Policy.* Accra MoE

Ministry of Education (MoE) (2017) *The National Teacher Education Curriculum Framework.* Accra MoE

Ministry of Education (MoE) (2018) *ESA Report, Inclusive Education in Ghana: knowledge, bottlenecks and solutions.* Unpublished MoE

Musset, P. (2010), *Initial Teacher Education and Continuing Training Policies in a Comparative Perspective: Current Practices in OECD Countries and a Literature Review on Potential Effect*, *OECD Education Working Papers*, No. 48, OECD Publishing.

National Association of School-Based Teacher Trainers (NASBTT), 3rd Ed. (2017) *Training and Assessment Toolkit: A guide to accuracy in the assessment of trainee teachers.* Bedford NASBTT

National Standards & the Science Curriculum (1996) *Professional Development for Science Education: A Critical and Immediate Challen*ge. Iowa: Kendall/Hunt Publishing Co.

National Teachers Council (NTC) (2017) *The National Teachers' Standards for Ghana*: Guidelines. Accra NTC

Weselby, C. (2014) What is Differentiated Instruction? Examples of How to Differentiate Instruction in the Classroom https://education.cu-portland.edu/blog/classroom-resources/examples-of-differentiated-instruction/