



**THE COLLEGE OF PUBLIC HEALTH MEDICINE
(DIVISION OF OCCUPATIONAL MEDICINE) OF SOUTH AFRICA**

REGULATIONS

**FOR ADMISSION TO THE EXAMINATION FOR THE FELLOWSHIP IN PUBLIC HEALTH
MEDICINE - OCCUPATIONAL MEDICINE**

FCPHM(SA) Occ Med

INSTITUTION	The Colleges of Medicine of South Africa
DIVISION	The Division of Occupational Medicine of the College of Public Health Medicine of South Africa
QUALIFICATION TITLE	Fellow of the College of Public Health Medicine - Occupational Medicine of South Africa
OFFICIAL DESIGNATION	FCPHM(SA) Occ Med
FIELD	09 (Health Sciences and Social Services)
SUB-FIELD	Preventive, promotive, curative and rehabilitative
NQF FIELD	9

1.0 COMPONENTS

A final exit examination

1.1 PRIOR LEARNING FOR ADMISSION TO THE PROGRAMME LEADING TO THE QUALIFICATION

A medical qualification registered with or recognised by the Health Professions Council of South Africa.

2.0 PURPOSE OF ASSESSMENT

The assessment of this qualification forms part of the credentialing process for medical practitioners, as specialists in Occupational Medicine. The Health Professions Council of South Africa (HPCSA) stipulates training requirements, including a minimum period of experiential learning. Candidates usually sit for the examination prior to the completion of the required period of supervised learning specified by the HPCSA. The aim of assessment for this qualification is to meet the need for formal examination certification, as well as to set standards, nationally, for such a qualification.

3.0 ADMISSION TO THE EXAMINATION

(read in conjunction with the Instructions for Admission to CMSA Examinations) *Website link*

<http://www.cmsa.co.za>

Final examination

- 3.1 A candidate may be admitted to the Final examination having:
(*criteria to be satisfied in the order shown below, successful completion of each step being a pre-requisite for the next step*)
- 3.2 Certification, by head of the candidate's training department or equivalent, that:
- The candidate will have completed 36 months as a registered student for the MMed (Occupational Medicine) or an equivalent degree at his/her University on the date of the first written paper, and has held a post recognised by the Health Professions Council of South Africa for the training of a specialist in Occupational Medicine for at least three calendar years.
 - The candidate has mastered at least 75% of the "skills" listed in **Appendix A** of the Regulations for Admission to the Fellowship of the College of Public Health Medicine of South Africa (Occupational Medicine):
Candidates must keep a portfolio of their practical work products, in the prescribed format (the "Portfolio of Learning" (Formative assessments, reports, policies, data analyses, studies, clinical examinations, articles published etc.) which will be required to be presented for inspection on registration for the examination.
 - For candidates who have been registered for the MMed (Occupational Medicine) or an equivalent MMed degree at a South African University:
The candidate has successfully completed and submitted the dissertation for the MMed degree, and the dissertation has been passed with proof of confirmation of passing the dissertation.
- 3.3 Submission to the CMSA, by the candidate, at the time of applying, of the following:
- The certification by the Head of Department or equivalent referred to in 3.2.
 - An official transcript or equivalent letter from the training institution's postgraduate office confirming the candidate has passed their dissertation. (see **Appendix C** of these Regulations for details).
 - An electronic copy of a short report on an occupational health topic (see **Appendix D** of these Regulations for details).
 - An electronic copy of the Portfolio of Learning. At least six reports of each 6 monthly institutional formative assessment report must be submitted (see **Appendix E** of these Regulations for details). It is recommended that all candidates entering into their registrar training from 1 January 2019 use the LogBox online portfolio if available. This is a free service and the app is available in both Apple and Android format. Please register at www.logbox.co.za.¹
 - An abstract of the MMed research report containing the Research Ethics approval details obtained from the relevant institution.
- 3.4 The candidate's eligibility to write the exam lapses if they have left a training programme in Occupational Medicine and four years has elapsed (i.e. four years after completing training in a post linked to an HPCSA training number in Occupational Medicine).

4.0 FORMAT OF THE EXAMINATION

- 4.1 Three online written papers (each of 3 hours duration) by the candidate, namely:
- One multiple choice paper consisting of 90 single-best answer questions each.
 - Two papers of ten short answer questions each. The candidate will be required to answer all ten questions.

¹ LogBox recommendation effective for new Registrars – 1 January 2019

- 4.2 Completing the occupational medicine clinical skills and oral examination, namely:
- a) The OSCE (Objective structured clinical examination) of 15 stations requiring interpretation of case studies, special investigations (eg spirogram, audiogram, chest radiographs, biological surveillance, allergy tests, occupational hygiene instrumentation, personal protective equipment, etc.) and photographs or other visual material. These will be items that cannot be tested in the written or general oral examinations.
 - b) Structured oral exam with a focus on fitness for work decision-making. This is a central component of the clinical examinations. Candidates will be provided with five clinical case scenarios and be required to answer questions on relevant clinical assessment, special investigations, impairment assessment, and fitness for work relevant to the occupational health and safety context. Candidates will be provided with the case scenarios and given approximately 60 minutes to evaluate all the cases before the structured oral exam
 - c) The candidate will be requested to make a 20-minute power-point presentation of their approach to or solution of a complex occupational health practice scenario, followed by 30 minutes of questions, delivered in a structured oral format. This will serve as an assessment of integration across all subject domains. The topic will be given to the candidate on the day of the exam. The candidate will be given approximately 2 hours to prepare the response and presentation as part of the exam after being handed the question.

- 4.3 The pass standard should be the level of competence expected of a specialist in occupational medicine: A candidate will be awarded the Fellowship if he or she attains 50% or higher overall mark across all components.

The final overall mark will be a weighted average of the component marks calculated as follows:

a) Short report		15/100
b) Written	Multiple choice paper	15/100
	Short answers paper 1	15/100
	Short answers paper 11	15/100
c) Practical	Oral Scenario	15/100
	Occupational medicine skills exam	25/100

A distinction is an aggregate mark of 75% or above. The candidate scoring the highest aggregate will be considered for the award of the SASOM medal only if he / she achieves an aggregate mark of $\geq 70\%$.

The final outcome of the examination for candidates including the final marks awarded for each section must be provided to the candidates' institutions when required.

- 4.4 Where a candidate fails to achieve an overall mark of 50% for the examination the examiners may recommend that the candidate be exempted from repeating one or more of the following sections in future attempts, provided that they have been passed at the current attempt:
- The short report
 - The entirety of the three written papers

If the candidate is still unsuccessful (i.e. aggregate mark is still $< 50\%$) then the entire examination must be re-taken at the following attempt.

Candidates who pass their written but fail their clinical practical and oral scenario examination will have one opportunity to carry forward their written marks. Should the candidate not sit for the next examination (within 12 months), the candidate forfeits the carry over marks and will be required to rewrite the entire examination thereafter.

4.5 EXIT LEVEL OUTCOMES

The core exit competencies of an occupational medicine specialist can be broadly categorised into four major outcomes in relation to knowledge, skills and attitudes (as outlined in **Appendix A**):

- Good clinical care
- Maintaining good clinical practice
- Relationships with patients and communication
- Working with colleagues

4.6 LEARNING PROCESS

The learning process offered through the training platform provided by the academic institution comprises: academic coursework; supervised service training attachments comprising clinical and non-clinical component rotations; and a major research project. These are attached as **Appendix B and C**

4.7 CURRICULUM AND SYLLABUS

The curriculum and syllabus will be specified by the academic training institutions with due consideration to the core exit competencies outlined in 4.5.

4.8 ARTICULATION POSSIBILITIES WITH RELATED QUALIFICATIONS

Candidates with related training or qualifications may request recognition of prior learning and exemption from supervised training time to a maximum of one year.

4.9 CRITERIA FOR REGISTRATION OF ASSESSORS

There will be at least six assessors for each examination. The assessors must be drawn from at least two academic institutions.

There will be one overall convenor. The convenor and assessors will be appointed by the President of the Council and must be drawn from a list of approved examiners that is ratified by the Council. There is a moderator for the examination, who preferably was the convenor of the preceding exam.

4.10.1 All examiners (including those tasked as external examiners in the formative clinical assessments) must hold 1 or more of the following degrees or qualifications (or their equivalent) for at least 2 years prior to the date of the first written paper:

- FCPHM(SA), subspecialist in occupational health
- FCPHM(SA) Occ Med, including associate members
- MMed (Occupational Medicine)
- MBChB plus an appropriate PhD in occupational health field

4.10.2 Examiners should hold an appropriate appointment in occupational medicine

4.10.3 Examiners are selected by the President of the College with assistance from the Heads of Departments of academic institutions from a list of approved examiners that is updated and approved by the Council at least once every three years

5.0 ADMISSION AS A FELLOW

5.1 Only candidates who have completed training in a CMSA recognised registrar post may be awarded a fellowship if successful in the examination.

5.2 Candidates who have written the examination as a prerequisite from the HPCSA for inclusion on the specialist register are not eligible to be awarded a Fellowship but will be sent a letter confirming their success in the examinations

All other candidates will be asked to sign a declaration as below:

I, the undersigned, do solemnly and sincerely declare that while a member of the CMSA I will at all times do all within my power to promote the objects of the CMSA and uphold the dignity of the CMSA and its members that I will observe the provisions of the Memorandum and Articles of Association, By-laws, Regulations and Code of Ethics of the CMSA as in force from time to time that I will obey every lawful summons issued by order of the Senate of the said CMSA, having no reasonable excuse to the contrary and I make this solemn declaration faithfully promising to adhere to its terms

Signed at thisday of

..... 20

Signature

Witness

(who must be a Founder, Associate Founder, Fellow, Member, Diplomate or Commissioner of Oaths)

- 5.3 A two-thirds majority of members of the CMSA Senate present at the relevant meeting shall be necessary for the award to any candidate of a Fellowship
- 5.4 A Fellow shall be entitled to the appropriate form of certificate under the seal of the CMSA
- 5.5 In the event of a candidate not being awarded the Fellowship (after having passed the examination) the examination fee shall be refunded in full excluding HPCSA candidates who are not entitled to a Fellowship
- 5.6 The first annual subscription is due one year after registration (statements are rendered annually)

JOHANNESBURG
January 2022

APPENDICES

- A CORE SKILLS AND EXIT COMPETENCIES OF OCCUPATIONAL MEDICINE SPECIALIST TRAINEES**
- B LEARNING PROCESS AS REQUIRED FOR CANDIDATES REGISTERED FOR THE FCPHM(SA) Occ Med**
- C. PORTFOLIO OF LEARNING**
(https://www.cmsa.co.za/view_exam.aspx?QualificationID=32)
- D: CMSA EXAMINATIONS GUIDELINES**
(https://www.cmsa.co.za/view_exam.aspx?QualificationID=32)

APPENDIX A

CORE SKILLS AND EXIT COMPETENCIES OF OCCUPATIONAL MEDICINE SPECIALIST TRAINEES

1.0 GOOD CLINICAL CARE

1.1 Good Occupational Medical Practice

1.1.1 Good Clinical Care

1.1.1.1 History, Examination, Investigation & Record Keeping Skills

Competency:

To be able to carry out specialist assessment of patients by means of clinical history taking, physical examination and use of relevant investigations.

KNOWLEDGE

Be able to

- Define the patterns of symptoms found in patients presenting with disease, as well as the patterns related to occupational attribution.
- Define the pathophysiological basis of physical signs.
- Define the clinical signs found in diseases.
- Define the pathophysiological basis of investigations, including those relevant to occupational attribution, and functional prognosis.
- Define the indications for investigations.
- Define the risks and benefits of investigations.
- Outline the impacts of occupational disease on the general demographic trend
- Outline the impacts of the general demographic trend on the occupational health
- Outline the cost effectiveness of individual investigations

SKILL

- Take and analyse a clinical and occupational history including an exposure history in a relevant, succinct and systematic manner.
- Overcome difficulties of language, physical and mental impairment.
- Use interpreters and advocates appropriately.
- Perform a reliable and appropriate examination.
- Interpret the results of investigations, including especially those relating to occupational attribution and functional prognosis.
- Perform investigations competently where relevant.
- Liaise and discuss investigations with colleagues and to order them appropriately.
- Record concisely, accurately, confidentially and legibly all medical records, and date and sign all records.

ATTITUDE

- Show empathy with and listen to patients.
- Appreciate the importance and interaction of psychological and social factors in patient's disease and illness behaviour.
- Respect patient's dignity and confidentiality.
- Acknowledge cultural issues.
- Appreciate the need for a chaperone and/or 'advocate'.
- Understand the importance of multidisciplinary team working in all aspects of patient care.
- Show a willingness to provide explanation to the patient as to rationale for investigations, and possible unwanted effects.
- Show an understanding of the role of and respect for other health care staff

1.1.2 Managing Chronic Disease

Competency:

To be able to carry out assessment of patients with chronic disease or rehabilitating from acute injury or ill health and to demonstrate effective management of chronic disease states in a workplace setting.

KNOWLEDGE

Be able to understand:

- The clinical presentation and natural history of patients with chronic disease.
- And recognise the consequences of therapeutic use of drugs, or of misuse or abuse of drugs or other substances on health, safety and performance.
- And recognise the impact on work on the disease
- The psychological, social, domestic as well as occupational impact of chronic disease.
- The role of rehabilitation services and the occupational medicine specialist's contribution.
- The concept of quality of life and how it can be assessed.

SKILL

Be able to:

- Assess capacity for work and prognosis through a comprehensive clinical and workplace based approach.
- Set long term realistic goals and rehabilitation management including monitoring and reassessment plans in consultation with the patient.
- Act as an advocate in negotiations with support services.
- Advise on reasonable workplace adjustments.
- Assess suitability for ill health retirement.

ATTITUDE

- Appreciate the effects of chronic disease states on fitness for work and on quality of life.
- Appreciate the importance of listening to patients and of supportive relationships with patients with chronic disease, and relevant stakeholders in their care and management.

1.1.3 Managing Infectious Diseases in the Workplace

Competency:

To be able to carry out assessment of patients with infectious diseases that may or may not be related to work, but likely to impact on the work of the individual or on the health of fellow workers, and to demonstrate effective management of such disease states in a workplace setting.

KNOWLEDGE

Be able to understand:

- The clinical presentation and natural history of patients with infectious disease, particularly TB and HIV and in specific settings, malaria
- And recognise the consequences of therapeutic use of drugs, or of misuse or abuse of drugs or other substances on health, safety and performance.
- And recognise the impact on work on the disease
- The impact of the disease on fellow workers
- The psychological, social, domestic as well as occupational impact of infectious disease.
- The role of rehabilitation services and the occupational medicine specialist's contribution.
- The concept of quality of life and how it can be assessed.

SKILL

Be able to:

- Diagnose, treat and know when to refer for specialist management all such diseases
- Assess capacity for work and prognosis through a comprehensive clinical and workplace based approach.
- Set long term realistic goals and rehabilitation management including monitoring and reassessment plans in consultation with the patient.
- Act as an advocate in negotiations with support services.
- Advise on reasonable workplace adjustments.
- Assess suitability for ill health retirement.
- Roll-out of workplace-based HIV ARV or TB DOTS programmes

ATTITUDE

- Appreciate the effects of infectious disease states on fitness for work and on quality of life.
- Appreciate the sensitivities associated with stigmatisation of such diseases among the workforce and community, and these impacts on the affected worker
- Appreciate the importance of listening to patients and of supportive relationships with patients with chronic disease, and relevant stakeholders in their care and management.

1.2 Time Management & Decision making**Competency:**

To demonstrate that the knowledge, skills and attitudes are used to manage time and problems effectively.

KNOWLEDGE

- Be able to understand:
- The need for action and how to initiate that action.
- Which activities take priority.
- The priorities and perspectives of relevant stakeholders i.e. management and workforce.
- The importance of completing tasks in a timely manner and communicating with others if this will not be possible.

SKILL

- Start with the most important tasks.
- Work more efficiently as clinical skills develop.
- Recognise when he/she is falling behind and reprioritise or call for help.

ATTITUDE

- Have realistic expectations of tasks to be completed by self and others.
- Be willing to consult and work as part of a team.
- Be flexible and willing to change as situations progress.

1.3 Information**1.3.1 Education & Disease Prevention****Competency:**

To ensure that the knowledge, skills and attitudes are used to educate patients and others in a workplace setting effectively.

KNOWLEDGE

Be able to understand:

- Burden of disease presentation in working communities
- The strategies to improve adherence to health-related initiatives.
- Principles of primary and secondary prevention and screening.
- The socio-economic, lifestyle, genetic and other risk factors for disease.
- The impact of individual behaviour and lifestyle factors on health and well-being.
- Relevant legislation and support services.
- The methods of data collection and their limitations.
- The criteria, schemes and methods for the statutory and/or voluntary reporting of occupational and/or work-related disease.

SKILL

- Assess an individual patient's risk factors.
- Encourage participation in appropriate disease prevention or screening programmes.
- Advise on lifestyle changes.
- Involve other health care workers, prevention and liaison services as appropriate.

ATTITUDE

- Encourage patients' access to further information and support groups including appropriate workplace support eg employee assistance programmes.
- Act in a non-judgemental manner.
- Suggest patient support groups as appropriate.
- Respect patient choice.

1.3.2 Health promotion**Competency:**

To assess the need for, organise, deliver and evaluate health promotion in a range of working environments.

KNOWLEDGE

- Major health risks relevant to working populations.
- Principles of health promotion and education.
- Health promotion agencies and sources of information.

SKILL

- Assess needs for health promotion in a workforce.
- Give advice on nutritional and other healthy lifestyle issues.
- Organise, provide and evaluate health promotion programmes.
- To participate in the delivery of health education in a range of settings.
- To liaise with other health professionals.

1.3.3 Enterprise Community Engagement**Competency**

Understand public health in its broad context, the impact of health on the general populations and know how to address issues of public health importance

KNOWLEDGE

- Know the principles of public health, the social determinants of public health
- Know the preventive and promotive aspects of public health
- Know the principles and conduct of occupational epidemiology
- Know the impact of occupation on the burden of disease
- Know the occupational health impacts on general demographic trends
- Know the impact of migration on occupational health

SKILLS

- Be able to conduct an appraisal of a public health issue, included an outbreak investigation
- Be able to implement a public health intervention
- Be able to evaluate public health programmes and interventions
- Be able to interpret the occupational impact on disease burden and demographics for planning

ATTITUDE

Be able to work with specialists in public health medicine as well as other public health experts to address specific problems

1.3.4 Information Management**Competency:**

To demonstrate competence in the use and management of health information.

KNOWLEDGE

Be able to understand:

- How to retrieve and utilise data recorded in clinical systems.
- The main local and national projects and initiatives in information technology and its application.
- The range of possible uses for clinical data and information and appreciate the dangers and benefits of aggregating clinical data.
- Know about disease notification and reporting

SKILL

- Demonstrate competent use of a database, spreadsheet word processing programmes.
- Define how to undertake searches and access web sites and health related databases.
- To apply the principles of confidentiality and their implementation in terms of clinical practice in the context of information technology.
- Process reports and notification of diseases

ATTITUDE

- Demonstrate the acquisition of new attitudes in patient consultations in order to make maximum use of information technology.
- Demonstrate appropriate techniques to be able to share information on computer with the patient in a constructive manner.

1.4 General Principles of Assessment and Management of Occupational Hazards to Health**1.4.1 Competency:**

To correctly carry out specialist assessment and management of Occupational Hazards to Health and Safety in a range of working environments.

KNOWLEDGE

Be able to understand:

- Physical, chemical, biological, ergonomic, psychosocial and other hazards to health in the workplace, and the illnesses and injuries, which they cause.
- Sources of information on and methods of evaluating and controlling risk.
- Principles of toxicology, physical (including thermal, noise, vibration and radiation) hazards, occupational hygiene and ergonomics.
- Occupational health standards, biological monitoring and the principles of health surveillance.
- Clinical features and investigation of occupational diseases and injuries.
- Emergency treatment of acute poisoning, physical and other injury at work.
- The principles of health risk management in the workplace.
- Principles of industrial hygiene survey sampling and sampling methods
- The relevant health and safety legislation that governs the working environment, and monitoring of workers, in particular the Occupational Health and Safety Act and its regulations, the Mine Health and Safety Act and its regulations, relevant medical aspects of the Merchant Shipping Act/Civil Aviation Act/National Road Traffic Act/Other related Acts and their regulations, the Basic Conditions of Employment Act and its Codes of Good Practice, The Labour Relations Act.
- The Compensation for Occupational Injuries and Diseases Act and the Occupational Diseases in Mines and Works Act and its list of compensable diseases. Also important are the diagnostic and compensability criteria contained in the Circular Instructions for occupational diseases under COIDA

SKILL

- Undertake assessments of working environment, recognise hazards, and provide preliminary advice.
- Undertake quantitative measurements, arrange and interpret more detailed measurements and advise on control measures.
- Recognise those situations where specialist assessment of the working environment is needed and be able to seek and evaluate advice.
- Diagnose work related ill health and injury and provide advice on prognosis, prevention and management, as well as rehabilitation and reintegration into the workplace.
- Carry out and evaluate health surveillance including biological monitoring for workers exposed to occupational hazards.
- Customise assessments to subgroups (such as pregnant women) and to individuals.
- Evaluate and advise on first aid facilities in the workplace.
- Describe and discuss, with examples, the implementation of health risk management in the workplace.
- Negotiate effective occupational health interventions
- Determine whether the illness is compensable as defined by the compensation laws, and if so, make appropriate claim submissions.

ATTITUDE

A commitment to liaison with safety representatives, safety officers, occupational hygienists, ergonomists and other specialists in the assessment of working environments.

1.4.2 Competency:

To be able to assess health problems and disease and evaluate fitness for work. Potentially any health problem might have to be assessed, but those seen more commonly in occupational health practice relate to *mental health, musculoskeletal, neurology, respiratory cardiology, dermatology, endocrine, reproductive genito-urinary, gastro-intestinal and ENT*. An example for mental health is given below.

KNOWLEDGE

Be able to understand:

- The spectrum of mental health disorders and presenting symptoms.
- The range of appropriate interventions to assist those with mental health issues.
- The changing nature of work.
- How good management practice can help to reduce work-related health issues.
- The key components of a mental health policy.
- The role of the occupational medicine specialist in mental health issues at work.
- The importance of a multidisciplinary approach to mental health issues at work.
- Individual susceptibility and coping strategies.
- Mental health issues and the law.

SKILL

- Be able to identify relevant symptoms of mental illness in the workplace.
- Be able to assist others in identifying relevant symptoms.
- Be able to access appropriate support for employees via counselling, EAP or other support services.
- Draft a policy on mental health and the workplace.
- To advise others on relevant legislation.
- To assist in the implementation of appropriate workplace interventions and rehabilitation.

ATTITUDE

- Work in conjunction with professional colleagues and other advisors.
- Have a non-judgemental attitude.
- Provide a supportive environment.
- Be aware of relevant symptoms in oneself or colleagues and act appropriately.

1.5 Assessment of Disability and Fitness for Work**Competency:**

To be able to assess functional capacity and evaluate fitness for work.

KNOWLEDGE

Be able to understand:

- Principles of assessing fitness for work.
- Statutory requirements of fitness for specific jobs.
- Principles and practice of rehabilitation and redeployment at work.
- Principles and practice of ergonomics as applied to job task adjustment.
- Individual and general factors affecting sickness absence.
- Principles of social welfare and other disability benefits.
- Ill health retirement and pension scheme functioning.
- Impact, scope and application of relevant legislation and codes of good practice in the workplace, particularly the Labour Relations Act, Employment Equity Act and the Basic Conditions of Employment Act

SKILL

- Perform clinical assessment of disability and fitness for work at pre-employment and post illness/injury. (With special reference to cardio-respiratory, rheumatologic and mental health assessments, whilst recognising the importance of assessing all relevant systems)
- Assess capability for work in those with a disablement/impairment.
- Manage cases suitable for rehabilitation and resettlement.
- Advise on impairment, disability, fitness for work, rehabilitation and redeployment.
- Liaise with other health professionals in assessing capability for work.
- Advise on sickness absence and ill health retirement.

ATTITUDE

Work in conjunction with professional colleagues and other advisors.

1.6 Environmental Issues Related to Work Practice**Competency:**

To be able to recognise and advise on health risks in the general environment arising from industrial activities.

KNOWLEDGE

Be able to understand:

- Physical, chemical and biological hazards to health arising in the environment from industrial activities.
- Basic toxicology of environmental pollutants.
- Methods for assessing and controlling environmental hazards and major industrial accidental hazards.
- Principles of integrated pollution control and incident control.
- The role of other professional groups with an interest in environmental health.
- Dangerous Substances (storage, packaging, labelling and conveyance).
- Relevant legislation to protect the environment from industrial pollution and other contaminants, particularly the National Environmental Management Act and the Air Quality Act
- Impact of operations at an industrial level on the environment and when to obtain specialist opinion.

SKILL

Describe or demonstrate how to:

- Be able to recognise and advise on the management of health risks from, and the control of hazardous exposure in the general environment arising from industrial activities.
- Be able to liaise with other specialists responsible for environmental and community health, including public health physicians and environmental health officers.
- Be able to identify sources of information on environmental hazards and their control.
- Be able to liaise with emergency personnel in the event of an industrial incident.
- Carry out the health component of an environmental impact assessment as directly determined by industrial activity, and to recognise and recruit other specialist input as appropriate.
- Implement environmental health governance under the guidance and direction of competent experts such as public health specialists and environmental health experts.
- Give competent opinion on the impact of industrial activity on the environment

ATTITUDE

- Cooperate and liaise with health professionals and other colleagues, and organisations.
- Respect the integrity of the environment.

2.0 MAINTAINING GOOD CLINICAL PRACTICE

2.1 Learning

Competency:

To develop a commitment to the concept of lifelong learning.

KNOWLEDGE

Be able to understand:

- Continuing professional development.

SKILL:

- Recognise and use learning opportunities and learning skills.
- To use the potential of study leave to keep oneself up to date.

ATTITUDE

Be:

- Self-motivated.
- Eager to learn.

Show:

- Willingness to learn from colleagues.
- Willingness to accept criticism.

2.2 Research

Competency:

To demonstrate an effective involvement with a research project and to undertake research and have a good knowledge of research methodology.

KNOWLEDGE

Be able to understand:

- How to design a research study.
- How to use appropriate statistical methods.
- The principles of research ethics.
- How to write a scientific paper.
- Sources of research funding.
- The principles and application of epidemiological methods in research and in problem solving
- The application of medical statistics and the interpretation of statistical analysis methods in scientific research.
- Computer based systems for data collection and analysis.
- Ethical considerations in research.

SKILL:

- Be able to define a problem in terms of needs for an evidence base.
- Be able to undertake systematic literature search.
- Be able to undertake a systematic and critical appraisal and review of scientific literature.
- Be able to produce an evidence based digest of the literature.
- Be able to frame questions to be answered by a research project.
- Be able to develop protocols and methods for research.
- Be able to execute an appropriate study design.
- Plan data collection for simple surveys including sample selection and methods of recording and storing data.
- Be able to use databases.
- Be able to accurately analyse data statistically.
- Have good written and verbal presentation skills.
- Present investigation and results in the format of a research-based report.
- Be able to write a scientific paper for peer-reviewed publication.

ATTITUDE

- Demonstrate curiosity and a critical spirit of enquiry, and where appropriate a critical attitude towards current practice.
- Acceptance of the need for critical review and for research so as to find a solid base for good practice.
- Ensure patient confidentiality.
- Demonstrate knowledge of the importance of ethical approval and patient consent for clinical research.
- Respect individual confidentiality when presenting data.
- Disposition to cooperation and liaison with statisticians and other research colleagues.

2.3 **Clinical Governance****Competency:**

To demonstrate an understanding of the context, the meaning and the implementation of Clinical Governance.

KNOWLEDGE

Be able to understand:

- The key strands of Clinical Governance.
- The working of the health care system in the country.
- Relevant Health & Safety policy.
- The concept of risk assessment, measurement of risk, and risk perception.
- The principles of evidence-based medicine.
- Methods of determining best practice.

SKILL

Describe and demonstrate how to:

- Critically appraise medical data research.
- Practise evidence-based medicine.
- Be able to handle and deal with complaints in a focused and constructive manner.
- Develop and institute clinical guidelines and integrated care pathways. Be aware of advantages and disadvantages of guidelines.
- Report and investigate critical incidents.
- Take appropriate action if you suspect you or a colleague may not be fit to practise.
- Confidentially and authoritatively discuss risks with patients to obtain informed consent.
- Be able to balance risk and benefits with patients.

ATTITUDE

- Be an active participant in clinical governance.
- Be actively involved in audit cycles.
- Respect patient's privacy, dignity and confidentiality.
- Be prepared to learn from experience, errors and complaints.
- Share best practice with others.
- Willingness to use guidelines as appropriate.

2.4 **Role specific competencies****Competency:**

To demonstrate the capacity to apply specialist competencies in Occupational Medicine to a particular workplace.

KNOWLEDGE

Be able to understand:

- The determinants of role specific competency, especially type of industry, type of jobs and hence 'exposures', demography of workforce, culture within the society, sector, employers and employees.

SKILL

- To be able to identify the knowledge and skills gaps pertaining to specific roles in particular workplaces at different levels: Society, the professional specialty, the occupational health service and the individual specialist.
- To be able to identify steps necessary to fill those gaps.
- To implement an exemplar activity to fill a role specific knowledge gap (critical literature search and review and/or original research, to contribute to the evidence base).
- To be able to devise an occupational health service level agreement and personal specification applicable to the specific role.

ATTITUDE

- To accept that specialist competencies have to be transferred to specific roles in the light of the underlying context.
- To accept the need for further personal development in order to fulfil specific roles.

2.5 Occupational health in a global market**Competency:**

To be able to determine the impact of the broader economic, socio-political and cultural influence on occupational health practice.

KNOWLEDGE

Be able to understand:

- Organisation of occupational health services in South Africa.
- How legislation and practice in South Africa are influenced by global developments.
- The impact of globalisation on occupational health and the pattern of occupational disease and injury.
- The implications for health of global travel.
- The role of WHO, ILO and other similar bodies in occupational health.
- The implications of biological, chemical, nuclear terrorism and emerging risks to health and safety of employees.
- The importance of fair-trade initiatives to health and wellbeing of other communities.
- The operations of government, government structures and government service
- The operations of industrial enterprises at production and management levels
- The functioning of private consultancies and managed care operations in occupational health and safety
- The roles and functions of labour broker services
- The context within which occupational health and safety and general labour legislation is developed and the processes related to such development
- The particular context and specific needs of vulnerable workers (young, migrant, mobile, aged, child, female, informal, seasonal, disabled)
- Health hazards in the entire product life cycle

SKILL

- To advise managers and others of their legal obligations.
- To ensure professional practice is compliant with relevant health and safety and employment law.
- To identify relevant symptoms of disease from employees returning from foreign travel.
- To provide appropriate advice to travellers on health and safety.
- To engage stakeholders such as government, employers, workers and community members or their representative organisations such as employer associations, trade unions, community based organisations, governmental and non-governmental organisations to promote occupational and environmental health and safety

ATTITUDE

- Respond appropriately to cultural differences in health promotion and disease management.
- Keep updated on government guidance on health impacts related to global threats to health and safety.
- Enthusiasm to develop new skills relevant to the changing needs of occupational health.

2.6 Teaching & Educational Supervision

Competency:

To demonstrate the knowledge, skills and attitudes to provide appropriate teaching, learning and assessment.

KNOWLEDGE

Be able to understand:

- Adult learning needs and styles.
- Range and structure of teaching strategies.
- The principles of evaluation.
- The principles of assessment.
- Formative and summative assessment methods.
- The principles and structure of appraisal.

SKILL

Demonstrate how to:

- Identify learning outcomes.
- Construct educational objectives.
- Design and deliver an effective teaching event or short course.
- Teach large and small groups effectively.
- Select and use appropriate teaching resources.
- Give constructive effective feedback.
- Evaluate programmes and events.
- Use appropriate assessment methods.
- Conduct effective appraisals.

ATTITUDE

- Demonstrate a professional attitude towards teaching.
- Show commitment to teach.
- Demonstrate a learner centred approach to teaching.
- Be honest and objective when assessing performance.
- Show respect for the person being assessed.

3.0 RELATIONSHIPS WITH PATIENTS AND COMMUNICATION

3.1 Ethical, Human Rights and Legal issues

Competency:

To ensure that knowledge and skills are used to cope with ethical and legal issues that occur in occupational health practice in a range of workplace settings.

KNOWLEDGE

- Be able to understand:
- The process for gaining informed consent for clinical and research activities.
- Strategies to ensure privacy and confidentiality.
- Responsibilities relating to data protection.
- The legal responsibilities of completing medical reports & certificates.
- Responsibilities in serious criminal matters.
- Understand human rights, patient rights and worker rights
- Responsible storage and transfer of confidential patient records and documents
- The guidance on ethics from the Health Professions Council of South Africa, the International Commission on Occupational Health and South African Society of Occupational Medicine.
- The concept of dual loyalty and its application in occupational health practise

SKILL

- Give appropriate information in a manner patients understand and be able to gain informed consent from patients and allow disclosure when appropriate.
- Appropriate use of written and verbal material.
- Be able to obtain suitable evidence or know whom to consult if in doubt.
- Recognise situations in which dual loyalty arises and be able to navigate these challenges

ATTITUDE

Consider and respect the patient's needs and rights as an individual.
Respect the patient's right to confidentiality.

3.2 Maintaining Trust**(i) Professional behaviour****Competency:**

To ensure that the knowledge, skills and attitudes are used to act in a professional manner at all times.

KNOWLEDGE

Be able to understand and describe:

- The relevance of continuity of care.
- All aspects of a professional relationship.
- The importance of boundaries in professional relationships.
- How to deal with challenging behaviour.
- The extent of one's own limitations and know when and from whom to seek advice in matters of personal actions, competence, health and fitness.
- The importance of personal wellbeing in relation to physical and psychological health, and the potential impact of substance misuse.
- The support facilities for doctors and other health professionals.
- The role and relevance to professional and regulatory bodies.
- One's responsibilities to the public.

SKILL

- Reflect on own practice by participation in an appraisal and audit process
- Recognise the situations when appropriate to involve regulatory and professional bodies
- Recognise when personal health takes priority over work pressures and be able to take the necessary time off.
- Ensure satisfactory completion of reasonable tasks with appropriate handover including documentation.
- Develop appropriate relationships that facilitate solutions to patients' problems.
- Deal appropriately with behaviour falling outside the boundary of the agreed or ethical doctor patient relationship.

ATTITUDE

- Be willing to admit mistakes and limitations and to consult and seek advice.
- Recognise personal health as an important issue.
- Be willing to seek advice from other relevant health professionals on personal health issues.
- Accept professional regulation.
- *Recognise the importance of:*
- Adopting a non-discriminatory attitude to all patients and recognise their needs as individuals.
- Seeking to identify the health care belief of the patient.
- Acknowledging patient rights to accept or reject advice.
- Securing equity of access to health care resources for all, especially marginalised and vulnerable groups.

3.3 Communication Skills

Competency:

To be able to communicate effectively with patients, employers, employees' representatives, professional colleagues and the media in a range of working environments.

KNOWLEDGE

Be able to understand:

- How to structure the interview to identify the patient's:
a) concerns b) expectations c) understanding d) acceptance
- The importance of informed consent.
- The need to share information openly with others, but within ethical, professional and legal constraints of confidentiality.
- The local complaints procedures.
- Systems of independent review.
- Organisation of occupational health services and the health service in South Africa and the role of the Department of Labour and other statutory authorities.
- Organisation and role of other health and safety professionals and disciplines.
- Ethical guidelines for communications between occupational medicine specialists, doctors, managers and others.

SKILL

- Listen to patients and other stakeholders.
- Use open questions followed by appropriate closed questions.
- Be able to communicate both orally and in writing to patients and others in a manner that they understand, avoiding jargon.
- Give clear information and feedback to patients and share information with employers when appropriate.
- Provide appropriate information on impact and prognosis.
- Manage dissatisfied patients/ relatives.
- Anticipate potential problems.
- Prepare written reports on a range of topics for a range of groups including managers, unions (eg for safety representatives) and health professionals.
- Be able to effectively participate in Committees and to act as a chairperson.
- Make clear oral presentations to a range of audiences including the media
- Apply ethical principles when communicating with others about individuals.

ATTITUDE

- Act with empathy, honesty fairness and sensitivity.
- Act in a timely and professional manner recognising your role in the organisation.
- Be impartial when providing advice to managers/employers.

4.0 WORKING WITH COLLEAGUES

4.1 Team Working and Leadership Skills

Competency:

To demonstrate the ability to respect others, work in multidisciplinary and intersectoral teams and within a management structure, as well as to have the necessary leadership skills.

KNOWLEDGE

- Be able to understand:
 - Roles and responsibilities of an occupational medicine specialist within such teams
 - Roles and responsibilities and areas of co-operation of team members and other relevant specialists.
 - How a team works effectively.
 - Own professional status and specialist competence.
 - Knowledge of appropriate referral pathways
 - Diversity in the workplace and society
 - Change management processes

SKILL

- Respect skills and contribution of colleagues to be conscientious and work constructively.
- Demonstrate the ability for objective setting; lateral thinking; planning; motivating; organising; setting example; influencing and negotiation skills.
- Delegate, show leadership and supervise safely.
- Recognise when input from another specialty is required for individual patients.
- Ability to prioritise activity and review progress.
- Ability to be an effective team player.
- Communicate effectively within teams and to affected parties, especially management
- Participate effectively in change management processes and implement change within the health context

ATTITUDE

- Recognise own limitations.
- Demonstrate enthusiasm; integrity; courage of convictions, imagination, determination, energy; and professional credibility.
- Respect colleagues, including non-medical professionals, and recognise good advice.
- Accept that ethical standards and professional good practice take precedence over financial or other conflicts of interest.

4.2 Management**Competency:**

To have sufficient knowledge of the principles and practices of management and industrial relations to be an effective occupational medicine specialist in a range of occupational settings.

KNOWLEDGE

Be able to understand:

- Principles and practice of management.
- Industrial relations and the role of employers, unions and others.
- Basic financial arrangements for a business including budgets.
- Techniques for needs assessments, costing and marketing of occupational health services.
- Management structures in different organisations.
- Principles of audit in a business and professional healthcare context.
- The principles of selection and appointment of staff.
- Staff management, team-working and appraisal of performance.
- Excellence in service delivery and the concept of quality.
- Record management systems.
- Health economics and health financing
- The location of occupational health within the broader social and political context, eg, within the NHI, SASSSA, DHS etc
- Occupational health management systems specifically such as the ILO-MS and the BS8800 and the OHSAS 18001 systems, as well as the ISO standards
- Insurance and other financial mechanisms affecting workers and industrial enterprises

SKILL

- Be able to demonstrate personal responsibility for aspects of management within a department of occupational Medicine or equivalent in an independent practice.
- Be able to strategically plan and set objectives for delivering an occupational health service including negotiating and managing a budget.
- Evaluate the effectiveness and quality of an occupational health service.
- Be able to work with managers, supervisors, employees and employees' representatives.
- Participate in audit relevant to the needs of the business.
- Be able to market an occupational health service.
- Define the roles of staff in providing an occupational health service and formulate job descriptions.
- Be able to collect and use information in the management of health and safety at work.
- Be able to make a business case for occupational health programmes and services
- Be able to cost occupational health services
- Be able to conduct evaluation of occupational health programmes or workplace interventions intended to reduce adverse health outcomes
- Be able to implement occupational health management systems in the workplace

ATTITUDE

- Be impartial when providing advice to managers/employers.

A P P E N D I X B**LEARNING PROCESS AS REQUIRED FOR CANDIDATES REGISTERED FOR THE FCPHM(SA) Occ Med**Course work

Attend and satisfy the requirements of the following academic programmes:

- Postgraduate Diploma in Occupational Health (or equivalent)
- Master of Public Health (or equivalent)

Attachments**Compulsory rotations**

- Occupational Medicine Specialist Clinic
- Workplace based Occupational Health Services (Public and Private)
- Pulmonology
- Dermatology
- Disability and workability (eg Work assessment unit / Local Authority clinics)
- ENT and Audiology

Optional rotations

- Environmental health (Provincial/Local Authority)
- Provincial / District Occupational Health Services
- Occupational Hygiene
- Neurology
- Orthopaedics
- Private Corporate Occupational Health Services
- National Institute for Occupational Health
- Chamber of Mines
- Asbestos Relief Trust
- Department of Labour
- Commission for Conciliation, Mediation and Arbitration (CCMA)
- OHS non- governmental organisations and trade unions (health and safety)